

Stationary Sources & Permits Committee
2013 Annual Meeting Summary and Notes
April 3-4
Hotel Albany – Albany, New York

Meeting Summary

Attendees

Meeting Participants

Leiran Biton, NESCAUM
Donald Dahl, EPA Region 1
Doug Elliott, VT DEC
Barbara Dorfschmidt, NH DES
Ruth Gold, RI DEM
Mike Jennings, NYS DEC
Eric Kennedy, ME DEP
Christopher LaLone, NYS DEC
Todd Moore, NH DES
Kathy Tarbuck, ME DEP
Marc Wolman, MA DEP
Steve Yarrington, NYS DEC

Via Telephone

Sunila Agrawal, NJ DEP
Patrick Bird, EPA Region 1
Yogesh Doshi, NJ DEP
Frank Jon, EPA Region 2
Susan Lancey, EPA Region 1

Guests

Michael Cronin, NYS DEC
Shawn Dolan, Virtual Technology LLC
Margaret Valis, NYS DEC

State Updates

Connecticut

Connecticut was unable to attend the meeting in person or via telephone.

Maine (Eric Kennedy and Kathy Tarbuck)

- Marc Cone, formerly of this Committee, has been promoted to Bureau Director (Air Director level). Eric Kennedy has taken the Licensing Section Manager position on a permanent basis.

- The Air Bureau has taken on additional divisions as well, including the finance, cost containment, and information technology groups.
- Agency is seeing many conversions to natural gas, both large and small scale. These license amendments can be time consuming. DEP is seeing a mix of LNG and CNG conversions. There are small CNG stations that do not require licenses to operate. One is all electric and another has small compressor turbines. LNG is trucked in from out-of-state, including the site in Everett, Massachusetts. Proposed LNG plants in Maine have not progressed.
- The Air Bureau issued a license for propane storage facility a couple years ago, but it has not yet been built.
- The Portland Pipeline (crude oil) from Ontario to Portland, Maine (stretching through both New Hampshire and Vermont as well) has been a source of controversy in Maine due to potential local impacts and effects on climate change. The company behind the proposed pipeline has not yet filed for permits, but has already been subject to organized opposition. Oil currently gets railed into Albany, New York and transported by barge to Nova Scotia for refining. The project would also potentially involve a storage facility in Portland.
- Maine is attempting to clean up and clarify regulatory language for consistency with federal rules. The agency is in the process of separating minor and major source NSR (new source review) rules, and is preparing to send the draft rule changes to EPA Region 1 for review.
- The licensing staff is focusing on issuing older part 70 license renewal applications, some of which are over 5 years old. The permitting group is up to full staffing now (7 people) as of a few months ago, so they will be pressing to get those out. The permitting group is responsible for the state's approximately 63 major sources and 600 minor sources.
- The state is revising its low sulfur fuel regulations to incorporate statutory changes to reduce S content. The levels are similar to NY sulfur content in distillate (.005% or 50 ppm by Jan 1 2016, and 15ppm 2018; Residual .5% by 2018), but the date changes haven't been finalized. Most permits have sulfur content limit even if waste oil.
- Licensors/inspectors are finding issues with older crematory and vet facilities. The facilities are having trouble maintaining the proper temperature in secondary chambers. The state requires that these chambers be maintained at 1,600 degrees (some at 1,800 degrees). Other states provided feedback: perhaps allow sources to certify emission compliance using a stack test from similar make/model, or reduce requirement to 1,600 degrees. Other states have not been focusing on these sources unless there are complaints.
- Maine is in the process of obtaining a NOx waiver request from EPA for the new standard, as the state has been informed by EPA that the existing NOx waiver no longer applies.
- Maine is requesting a structural SIP change to get out of requiring offsets for VOCs. If the area is in attainment. Currently VOC offsets are required statewide regardless of actual attainment/nonattainment status since Maine is in the Ozone Transport Region (OTR). The request is under EPA review. NOx and VOC emissions from Maine are not significant for regional O3.
- Small boat builders: VOCs, minor source licenses are being written to incorporate language consistent with what Steve Rapp of EPA has stated. EPA has used its enforcement discretion when dealing with restrictions on PTE by rule. NH had put in place restrictions limiting operations.
- A couple of companies are interested in wood residue to biofuels. Waste digester to energy projects, sewage sludge, food waste, etc.
- Two new permitted facilities were also discussed:

- Red Shield, a kraft pulp and paper mill in Old Town, is taking a side stream of washed and screened pulp from their digester and using it as the raw material in demonstration-scale cellulosic biorefinery plant. Due to the corresponding increase in actual pulp and stream production from the existing mill, this was licensed as a major modification. A pilot plant in one of the mill buildings had been in operation for a while as the process was researched and tested.
- Thermogen is a torrefied wood processing plant is in preconstruction at an industrial site in Millinocket. The product is expected to be used in the UK for coal-replacement. Thermogen is also interested in siting an additional plant in Maine. The main issue from a permitting standpoint is the VOC emissions.

Massachusetts (Marc Wolman)

- The GHG Tailoring rule amendments to the Title V Operating Permit regulations were proposed, several comments were received, a response to comments document was written and incorporated into a final regulation package which is moving slowly through the approval process outside MassDEP. Once finalized, MassDEP will be focusing on communicating with the regulated community, and assist the regulated community to identify any that may need to cap GHG emissions, amend existing emissions caps on other pollutants such as NOx to incorporate GHG emissions, or apply for an Operating permit before the deadline 12 months after the regulation takes effect.
- Dominion has sold its Salem Harbor station. The Salem Harbor station was purchased by Footprint which has begun the application process to build a combined cycle natural gas power plant which will be a PSD/nonattainment NSR project. Footprint elected not to use emissions reductions from the existing units to net out of major NSR. Since Massachusetts took PSD delegation from EPA, the state is the permitting authority for this PSD permit. Dominion has also announced its intent to sell Brayton Point.
- Minor modifications to existing PSD permits to incorporate startup provisions is an issue. New Jersey has had to deal with a number of regulatory PSD minor modifications, but other states are SIP approved. Massachusetts is looking for examples, and Maine may have relevant language.
- The delegated federal PSD regulation included the biogenic CO2 deferral, but the state has announced it will use its “wildcard” provision in its permitting rules to require minor new source review for biomass projects that would qualify for PSD deferral. EPA may let the biomass deferral for PSD lapse, and there has been no announcement with regard to an extension from OAQPS.
- Massachusetts is in the process of working with EPA to understand the minor new source review program features it may need to incorporate into a new submittal to EPA in the wake of the Sierra Club settlement on SIPs. One special focus is the public comment process for minor sources. Based on current rules, a hold is placed on construction when someone appeals a completed permit even if there was no advertisement for an appeal period.
- The state has a moratorium on new facilities that combust municipal solid waste, but is considering lifting that ban for small, “green energy machine” low-emitting devices.
- The state has questions about how to deal with server farms and supporting diesel standby generators, treated as synthetic minor sources. When new generators are added at such facilities, modeling is required under the approval process. In at least one case, modeling NAAQS compliance has been a challenge with respect to NO2 and PM2.5. MassDEP is also working through the issue of exempting intermittent sources from 1-hr NO2 NAAQS modeling

New Hampshire (Barbara Dorfschmidt and Todd Moore)

- Considering amendments to rules on emergency generation. Currently, there's a 5-year permit and sources operate under that generic permit. Gary has been tracking federal regulations and whether there is a need to update the state definition.
- There have been some conversions to pipeline natural gas, but no LNG. The state wants to take a look at existing compressor stations with PSD permits. Massachusetts has one in Hopkinton that's a Title V so it's online.
- Fuel S regulations – no updates. Actual fuel is much lower than by statute. Fuel sulfur regulations have a limit on NG (not on oil) but it doesn't match federal levels. The state is considering taking out the limitation for sulfur in natural gas because it's not controlled by the end user, and in practice there is hardly any S in natural gas, but the state would need to make up for the potential increase, despite the fact that there would be no actual increase. None of the other NESCAUM states reported having limits for S in NG.
- Since scrubbers will be installed for the state's power plant, SO₂ emissions have declined drastically, pushing emissions and associated emission fees down. This puts the program's budget in danger. Fees in ME are based on permitted, not actual emissions. But they are based on actuals in NH and NY. The rate is approximately \$200/ton in NH. There's an inventory adjustment factor, but it hasn't been making up for the shortfall. Vehicle inspection fees pay for air program in CT and VT, in part at least.
- Renewing permit for Schiller Station and Sierra Club is waiting for opportunity to challenge the permit. Elliot, Maine is interested in the permit as well. Massachusetts has a permit wildcard which allows them to request information and get a permit under Title 5.
- EPA says that NH noticed existing source in Claremont, NH worked with the source to reduce SO₂ emissions. The source moved to LNG which solved the problem.

New Jersey (Yogesh Doshi)

- New Jersey was the first state to do over their rule for May 2015, rule impacted 4000 MW of simple cycle combustion turbines. Each facility was required to submit annual progress report. Anticipated 3000 MW will be retired, maybe 3600 by May 2015. Very active permitting for last 2-3 years. By Dec 2012 approved 2000 MW of CC power plants, all strictly NG and under construction now. One plant (coal fired) had entered into administrative consent for NSR violations, but facility applied to shut down and repower with 1 CC plant. Final PSD permit approved last month, now under construction. 6 coal fired boilers with state of art controls. Emergency impact – region 2 guidelines, so long as doesn't operate with major source, no modeling required. All of these are subject to GHG rule, require CEM for CO₂ and continuous, annual for CO₂.
- Another facility for municipal solid waste incinerators with ESPs. EJ community location, facility agreed to install baghouse. Final decision soon. Installed within 3 years from approval. Major problems – NAA for ozone, require NO_x & VOC offsets. Working with New York and other states to address.

New York (Mike Jennings)

- New sulfur in fuel regulation. Fuel sulfur level requirements will be in effect as of July 1, 2014 for purchase, 2016 for firing for 15 ppm distillate oil and 0.5% residual oil. For the first time the state has requirements for sulfur in waste oil, set at 0.75%. No one

commented on the Fuel S rule that the fuel was not yet available, which may be instructive for when other states go to issue their rules.

- NYS is proposing to adopt revisions to its Part 228 surface coating regulations to incorporate federal rule changes and new CTGs.
- Incorporating sewage sludge Quad M into regulations. Some existing sewage sludge incinerators.
- Power plants. Region 3 area proposed, cricket valley (permitted) & CPV (going to public comment within a month), coming in at the bowline 3 project (certificate under article 10 process), decided that it wasn't financially available. Nuclear plant near NYC is considering being shut down due to concern over meltdown.
- Glass plant (diesel particulate ceramic filters) looking to expand, looking for offsets in PA. International Paper at Ticonderoga is getting a gas line put in from Vermont, bringing NG into one of the last craft pulp mills, going from 1.5% S No. 6 boilers to NG. 2 fluidized beds in the western part of the state are trying to convert to biomass, another (Niagra county) tried to convert over and has shut down.

Rhode Island (Ruth Gold)

- Process optimization (in Massachusetts) moving toward an information management system. NH division hired a business analyst who knows both the IT and environmental departments who has been translating DEP process to software program. Well worth the added expense.
- Small business plans. RI DEM is evaluating adverse impacts on small businesses in RI. Each department/office has to complete an evaluation of each existing regulation over the course of the next few months. As of January 1st the Office of Air Resources has completed 25% of the evaluation. In addition agencies may not file any new regulations without demonstrating an emergency or without expressed consent of the Governor. NY had a similar process, now have to fill out a small business document. NY must show that they will not impact jobs or any small business with any new rule.
- The pre-construction permitting group from Air Resources also completed training on LEAN/Kaizen principles. I felt that the outcome was positive and hoped that the proposed changes/ideas will improve and enhance our process.

Vermont (Doug Elliott)

- Natural gas conversions. Heavy oil users converting to CNG. Hot mix asphalt plants also converting to CNG. One facility looking at LNG. While our heat content value of natural gas had been consistent for our one pipeline in VT, they are now looking into the possibility of variability as new CNG/LNG suppliers may have different sourced natural gas. This could affect annual revenues based on emission fees but VT is not overly dependent on just a couple sources and charges a base fee to all that register as well as a cost per ton for emissions.
- Still working on 37 MW wood-fired power plant in Springfield.
 - VT has no renewable energy portfolio, facility may be anticipating legislation putting a REP in place. No biomass deferral in our PSD GHG regs. GHG BACT has focused on efficiency of plant that was proposed.... not looking at conversion to combined cycle gas. Agency is addressing sustainable harvesting issues in another state permit.

- Fluidized bed. Heating loop for industrial park but this only marginally affects overall efficiency. Efficient for wood steam generating plant, but steam generating plants in general are not very efficient and wood plants are even less so due primarily to fuel moisture.
- Whiskey distillery, 15-20K barrels makes 50 tons per year VOCs. Black mold associated with whiskey aging facilities. It grows in presence of ethanol. Primarily aesthetic issue as the black mold grows on most surfaces but also potentially affecting organic farm next door. Sampling will be need to determined alcohol content as that will be necessary to calculate emissions.

RICE NESHAPs – Update and Summary of the March EPA/ISO-New England Meeting in Chelmsford, Massachusetts

Susan Lancey, EPA RI

Susan Lancey provided an update from the recent meeting in Chelmsford with EPA, ISO-NE, NESCAUM, and the New England states. Presentations from the meeting are available from Susan or through Leiran.

Units in the ISO-NE program meet the EPA definition of emergency generation.

Maine has included reference to OP4 before, but the rule did not address define the term emergency. Instead, the term emergency defined on a permit by permit basis. In Massachusetts, the emergency definition was set in 2004, commented on by ISO-NE for limited demand response allowance, and accepted by Mass. ISO-NE is the regional transmission organization for all of New England except for Northern Maine.

Experience sharing on GHG Permitting

Mike Jennings, NYS DEC

Carbon capture and sequestration (CCS) is not considered to be BACT or LAER. That leaves controlling high GHG emitting sources through efficiency standards and operation best practices.

GHG for Title V can be triggered by SF6 in transformers, leakage from which has been looked at by one of the EPA regions.

- There is an existing permit out there limiting the amount of leaks and leak detection, so this may be considered lowest achievable or best available technology for SF6.
- According to EPA, CCS should be looked at until Step 4 of the process and should not be ruled out as technically infeasible. EPA will raise comments if CCS is dismissed as technically infeasible.
- CCS does contribute to high parasitic load (20-50% reduction in electric output).
- Compressor stations required to pump it into the ground. Use most up to date AP42 emission factors and CO2e.

Looking at turbines and boilers greater than 250 heat rate. Pound per MMBTU or pound per hour for CO2 only. 12-month rolling average, incorporating start-up and shutdowns. Require best heat rate available.

Oil fired EGU in Montville, CT going from coal to biomass. CT also asking for attainment status for SO2. 12-month rolling average, annual test.

EPA Updates

Donald Dahl, Brendan McCahill, Pat Bird, EPA R1; Greg John, EPA R2

EPA is in the process of developing an informational survey for GHG Step 4. In particular, they will be soliciting feedback on the financial and staffing impacts of GHG permitting. EPA R1 told HQ that the states don't usually know hours spent on permitting. EPA will be basing its rule for the next step of GHG permitting thresholds based in part on information gleaned from this survey.

Michigan court case: Appeals court overruled, if you think the source is going to operate as a major source, the state can sue.

Infrastructure SIPs for PSD rules, incumbent upon states that language states that NO_x is a precursor to ozone. Donald will send language from Section 66 to Leiran.

April 8 stakeholders meeting for CSAPR next steps. EPA has asked Supreme Court to overturn DC Circuit court ruling. EPA is currently quantifying emissions from each state and evaluating contingency options for a trading program.

EPA expects to complete its draft guidance on compliance certification for Title V by June 2013.

EPA is in the process of changing the global warming potential (GWP) factors. Proposed changes to them and hoping to finalize by October. State rules would need to be updated. This should not affect ME and RI in approval of NSR. EPA R1 hopes to get NSRs approved before GWP changes. GWP are in Part 98 and are designed to be consistent with the revised IPCC GWPs. Added pollutants to the families, decreasing nitrous oxide and SF₆.

EPA issued a SIP call for provisions in states existing SIPs with provisions for startup shutdown malfunctions where SIP would say that no emission limits exist during these events. Sierra Club pointed out flaws in state programs, some dealing with opacity. States are asked told to change it, and to avoid language with anything referring to director's discretion, but can come up with alternatives.

SILs and SMCs: Must include background levels, per statute. You can still use the existing monitoring network *if* it is representative of the facility, per the state's judgment. This approach is likely to be carried over to other pollutants, though it only applies for PM_{2.5} as of yet. Existing (older) data may be able to be used if it represents dirtier air and is thus more conservative. Background data will become more important. States are free to use SILS in their language, as they are not approved by EPA.

- When background is approaching standard, as it is for several pollutants, what happens if you don't pass the cumulative analysis and meet the NAAQS?
 - If you don't meet the NAAQS, you have to go in to check in the model to see which source is contributing how much, if that source has not been contributing much, that source can still be permitted. Actually easier to put a new source in a NAA. Updated inventory would help in making sure new sources would show compliance.

No sources have had site-specific monitoring for SILs/SMCs. Need to have thorough documentation and justification that background data is representative. States need to do oversight and audits of monitoring sites/equipment. Some standards are 3-year values, CAA says you must model for 1 year.

Biomass deferral – EPA has not decided whether to extend or allow it permanently. This issue won't affect NY because it doesn't allow a biomass deferral regardless. EPA R2 is implementing furlough, up to 13 days until Sept 30. Phase 1 will be April 21 through June 15, each employee supposed to take 32 hours off (4 days), then 2 week period for reassessment. Friday before Memorial Day weekend is a mandatory day off. EPA still has the same commitments and deadlines, so the expectations of the agency are still really high regardless of what happens with furloughs.

Air branch R2 has lost 5-6 people without backfilling. EPA R2 requests additional notice so that they can manage upcoming permits.

Pat Bird presented on MATS and energy reliability. (See presentation.)

- In an ensuing discussion about PM CEMS, Don Dahl indicated that PM CEMS devices do exist, but that they are costly both in terms of initial investment and ongoing maintenance and audit costs.

Permitting/modeling issues

Margaret Valis, NYS DEC

Margaret Valis, who serves on the Permit Modeling Committee, presented on permit modeling, especially with regard to the short-term standards (NO₂ and SO₂). Her presentation is available.

Training: Digital Method 9 – DOCS II

Shawn Dolan, Virtual Technology

Shawn Dolan presented information about the alternative Method 9, or Method 082, the Digital Opacity Compliance System (DOCS) II. The output from the system is a Visible Emissions Observation report. The DOCS II alternative provides some advantages over the traditional method because it separates data capture from data analysis, is somewhat more accurate, preserves better records for possible future court challenge, and may be a more affordable option for states.

States wishing to learn more about the DOCS II system can get in touch with Shawn. States can explicitly allow for DOCS II alternative testing by including language in the permits during the re-permitting process.

Meeting participants also attended a facility tour of the GE Energy Storage manufacturing facility.