MINUTES OF THE
ADEC 10TH WORKGROUP FOR
GLOBAL AIR PERMIT POLICY DEVELOPMENT FOR
TEMPORARY OIL AND GAS DRILL RIGS
FEBRUARY 4, 2016

I. INTRODUCTIONS

Chair Koch called the meeting to order at 1:02 p.m. and welcomed everyone to the meeting. The group's overarching goal is to obtain operational flexibility for temporary drill rigs while protecting air quality. At the October 30, 2015, meeting, the Technical Subgroup, comprised of industry, AECOM and DEC, presented their consensus work for the North Slope. The group determined that the next step should be moving forward with policy discussions. Therefore, the Options Subgroup was reconvened. The group consists of Brad Thomas, ConocoPhillips and the Alaska Support Industry Alliance; Joshua Kindred, AOGA; John Kuterbach, permit manager at DEC; and Tom Turner, DEC.

The roll call was taken and the following members were present: *From Juneau (telephonic)*: Denise Koch, Chair, director of air quality for the Alaska Department of Environmental Conservation (ADEC); Deanna Huff, modeler, ADEC, Technical Workgroup; John Kuterbach, Air Permits Program manager, Main Workgroup; and Rebecca Smith, Tech Services Support. *From Anchorage:* Tom Turner, DEC Air Quality, Tech Services manager; Mike Munger, Cook Inlet Regional Citizens Advisory Council, Main Workgroup; John Neason, Nabors Alaska Drilling; Josh Kindred, Alaska Oil and Gas Association, Main Workgroup; Brad Thomas, ConocoPhillips; Main Committee; Laura Perry, ConocoPhillips; Robin Glover, BP; Gordon Brower, Main Workgroup. *From the Outside Alaska (telephonic):* Al Turbovich; Allen Peck, BLM, interested stakeholder; Ann Mason, SOR; Dave Bray, Seattle, EPA; Tom Coulter, BLM and National Operations Center, Denver; Greg Nichols, BLM, National Operations Center; Dan Fremgen, Juneau, DEC; Julianna Orczewska, Hilcorp; Tiffany Samuelson, ACOM, Colorado; Alan Schuler, DEC, Tech Support Group; Wallace Evans, Hilcorp, Technical Subgroup; Tom Damiano, ACOM; and Dave Maxwell, BLM.

Mr. Turner welcomed everyone to the meeting, which was being held via GoToMeeting. The Options Committee gave a PowerPoint presentation, with questions and comments being taken from periodically.

II. PRESENTATION AND DISCUSSION OF DRILL RIG OPTIONS COMMITTEE

Mr. Kuterbach began the PowerPoint presentation. The Options Committee consists of Tom Turner, Brad Thomas, Joshua Kindred and John Kuterbach. After discussions, the committee decided our goal was to recommend technically sound and statutorily approvable approaches that

would reduce the current permitting requirements while ensuring the portable oil and gas operations do not endanger short-term air quality standards. We reviewed the work of the Technical Committee, which was only valid for the North Slope as modeling is still being done on the Cook Inlet area. We agreed there should be a mechanism to address operations that might violate air standards. We looked at the efforts on fuel and exhaust limitations, and Mr. Thomas presented an outline of possible types of restrictions. Earlier in the process, we had talked about expanding ambient monitoring and getting away from the modeling approach, similar to how Wyoming handles mining, more of a monitoring approach rather than a modeling approach. Another option is somewhat of a quasi permit. Rather than imposing restrictions, there would be normal permitting and modeling for source specific conditions when levels were exceeded.

The committee's recommendation is fuel and exhaust limitations. Most operators will not be impacted by these limitations, because they are well below the limits. This prevents, rather than responds, to air quality violations and there is no need for expensive ambient monitoring or case-by-case modeling.

The floor was opened to questions and comments.

In response to Mr. Munger, Mr. Thomas said the Cook Inlet modeling work had been started and should be concluded within six weeks. However, he did not know how long it would take ADEC to complete their review.

Mr. Brower arrived at the meeting.

Mr. Kuterbach reviewed what had already been covered in the meeting for Mr. Brower's benefit. After reviewing the goals of the Options Committee, we recommended a technically sound and approvable approach that would reduce current requirements, but still protect air quality. Based on the work of the Technical Committee, we agreed that unrestricted drilling on the North Slope could operate in such a manner that modeling would show noncompliance, so we need to address that possibility. We looked at three possibilities. The first was fuel and exhaust limitations based on the work of the Technical Committee. The other two were expanding ambient monitoring and reducing permitting by relying on the ambient monitoring or using a registration and fuel use record as a trigger for case-by-case permitting at higher levels. The committee recommended the fuel and exhaust limit. Most operations are well below these limits and day-to-day operations will not be significantly affected. It will prevent, rather than respond, to potential air quality violations, as well as avoid additional expenses, monitoring or case-by-case modeling. Mr. Thomas said the modeling for Cook Inlet was still in progress.

The floor was reopened for questions and comments.

Mr. Schuler was DEC was waiting for the Cook Inlet modeling to be submitted, which would be about another six weeks. DEC would then have to review it.

Mr. Kuterbach continued with the presentation. The committee considered recommendations for imposing limits for the portable oil and gas operations. We came up with three possibilities.

The first option is to put limitations directly into regulation. There would not be an application or permit, per se. The operations would have to comply with the regulation and we would send out inspectors to ensure compliance.

The second option is adopting a permit by rule, which is similar to direct regulation but would have a notice component where the permittee would register and say they were operating under the permit by rule. This is similar to direct regulation, but provides more information to the department. Neither of these options would require an application. As regulations, they would be difficult to change once they were written and would require a new regulation process, which could be both good and bad. This can be good if they are not changed frequently; but would be more difficult when changes were necessary. The regulation of portable oil and gas operations is part of our State Implementation Plan (SIP) approved by the EPA for protecting air quality. A regulation change, which would be a change to the SIP, would have to be approved by the EPA and is an extensive process including its publication in the Federal Register.

The third option is imposing limitations using the regulations in our current authority to issue permits. It would still require drafting something out, going out for public notice, taking public comments, and finalizing the general permit, just like the minor general permits #1 for exploratory drilling. Essentially, this would be a new minor general permit. An application is required for the permit, but there are no requirements for case-by-case reviews of the operation. As long as the application is complete and the operation meets the qualifying criteria, the permit would be issued. It would be relative easy to update. We would have to do a public comment process, but no regulation reviews by the Department of Law, no filing with the Lieutenant Governor, and no approval by the Commissioner. There are administrative requirements, but those are at my level to issue the permits. The other advantage is it would not change the SIP. The SIP already allows for the issuance of general permits for minor general permits. The one problem is that since our technical analysis used some non-guideline modeling techniques, we are obligated under federal regulation to have that approved by the EPA, but it does not have to be published in the Federal Register. This decision used to be made by Region 10, but they recently lost their modeler and now have to go to North Carolina OAQPS to get approval.

Ms. Koch asked Mr. Kuterbach to talk about the steps and timelines associated with the EPA doing SIP change approvals versus modeling. Mr. Kuterbach said SIP changes could take a long time or a short amount of time, depending on the motivation at the EPA and the importance of the change. Ms. Smith, who works with the SIP people at EPA in Region 10, said recent changes had gone through the system in less than a year, some about six months. The EPA has caught up on their backlog, although there is a new batch going forward. It is not like in the past when it could take six years to get an approval. On the other hand, they are currently short staffed. The highest priority SIP changes are for the Nonpoints Search Group, both for the EPA and the department. The ones for the permitting side are more minor and of lower priority. The EPA has been trying to be responsive, and they have gotten through a large number of approvals that were backlogged.

Mr. Turner said in his experience, a regulation change, like fees, went through quickly. A technical change requiring a change to the SIP would be scrutinized more closely by the EPA and would take longer. Mr. Kuterbach reiterated that Region 10 now had to go through OAQPS for modeling. Region 10 has received approval to hire an experienced modeler, but he did not know where they were in the process. Mr. Schuler said guidance was issued in December 2015 that states regional offices now have to touch base with EPA Headquarters before issuing these types of approvals. Mr. Bray did not feel there would be a problem using PVMRM for the modeling, but they were still waiting on an approval from EPA Headquarters. However, he did not feel the committee's progress should be delayed in to making a final decision, because he did not feel using PVMRM would be an issue.

Mr. Thomas provided his input on the proposed options. The direct regulation and permit by rule options are lengthier than the general permit option. The general permit option has the flexibility to adapt to changes in drilling. We are looking at drilling in terms of diesel fuel use only, but at some point, there could be gas fired rigs that require another regulatory approach. The general permit option has the flexibility to accommodate that.

Before continuing with the presentation, Mr. Kuterbach requested a poll the workgroup members to see if they were in agreement with the general permit approach as a means of moving forward with imposing limits. Ms. Koch, Mr. Thomas, Mr. Kindred, Mr. Brower, and Mr. Munger all agreed with the general permit approach.

Mr. Thomas continued with the presentation. The general permit approach would be defined through the draft general permit process. We felt there should be a simple process. At the beginning of the calendar year, you would identify your drilling program, specifically the number of wells to be drilled, and put in for an application. After submitting the application and paying the fees, you would be authorized to drill your first well. If more wells were to be drilling under an existing drilling plan, there would be a mechanism to amend the original application, including paying any associated fees. The additional wells would be authorized as long as you stayed within the daily fuel thresholds and kept daily records to demonstrate compliance. We still have to work out the reporting requirements; at the very least, you would have to report any deviations. This would be very similar to the minor general permit #1.

Mr. Kuterbach discussed the general permits. The applications could be very simple. Once the application is completed, the general permit would become effective for the operations.

Ms. Koch said she appreciated the intent of having a simple application, but she wondered how changes would be handled through the application process for something like a drill rig that was already identified on a pad, but was going to be removed. Mr. Kuterbach said the details of the general permit and its implementation still had to be worked out. With general permits, as long as the modified operation still met the qualification criteria for the permit, it would basically be dealt with by submitting a notice and an additional fee. After the change was submitted, it would be approved as long as the total operation still fit within the general permit specifications.

Mr. Brower discussed the concept of a general permit. To put it into context, he discussed the borough's general permit it issues to the Corps of Engineers Driveway Fill Program, which he described. He felt the concept of a general permit was viable.

Mr. Thomas said the qualification criteria would basically be a commitment by the operator to operate below daily fuel thresholds, because those thresholds are where modeling indicates the ambient air quality standards are affected. If an operator makes that commitment, they are qualified for the permit. The operator notifies the department how many wells will drill under those limits, they pay the fees and complete the application, and they are authorized to operate.

Mr. Brower asked if drill rigs that were permitted to operate on a general permit could operate statewide or if the permits were specific to a location. Mr. Thomas said his preference would be that the permits would be for the operator's drilling program, not a specific pads, rigs or locations.

Mr. Brower asked about the process of drilling in other locations if a rig suddenly became available. Mr. Thomas said if a rig became available and there was an opportunity to drill more wells in a given year, there would be a process to amend the application, submit it to the state, pay additional fees, and the operator would be authorized to drill the additional wells. Mr. Brower felt an operator who was issued a permit should be allowed to operate anywhere within the state. Mr. Kuterbach said the technical details still had to be worked out, but as long as an operation remained within the contemplated operation and technical analysis, there was no problem with the permit being applicable to broad areas. However, the state has an interest in knowing where the drill rigs are located at any given time for inspection purposes.

Mr. Munger said the general permit concept requires operators to comply with applicable fuel limits. He questioned how the state certified an operator's usage. Mr. Kuterbach said the state used the Ronald Regan method of trust, but verify. There needs to be an actionable measurement that shows the operator is complying. The permit fees fund routine compliance evaluations, including periodic evaluations of the drilling operation. The frequency and extend of the inspections are to be determined based on the fees collected and the staff available. Minor permits, unlike major facilities, do not have federal inspection schedule requirements. For major facilities, we do a full compliance evaluation once every other year, and onsite inspections at least once every five years. Those are done more frequently for oil and gas operations. Minor sources are not subject to the federal inspection schedule, but we have a goal of periodic reviews for compliance evaluations. For onsite inspections, we target once every seven years for stationary sources. The committee will have to decide the appropriate frequency for drilling operations. Since the likelihood of these operations exceeding the limits is low, we may do targeted inspections rather than random evaluations.

Mr. Thomas continued with the presentation. The committee decided on the high-level general approach. There are still a number of details to be worked out, such as monitoring. We can rely on some precedence within the program and build on that. DEC will decide on the appropriate fees and how those would be applied. In the modeling, we have daily fuel volumes that we are expected to operate under. However, modeling indicates that those can be exceeded up to a point.

For example, the daily fuel volumes for an isolated pad are 14,700 gallons. Modeling indicates that you can go 25 percent above that, once every five days, and still demonstrate compliance with the ambient standards. We would like to build that flexibility into the program to accommodate drilling operations that have additional fuel for small amounts of time.

In response to Mr. Munger, Mr. Thomas discussed when extra fuel might be burned in a drilling operation. Routine drilling occurs for less than 24 months, but rigs stay in the same location for 24 months or more when doing developmental drilling. The fuel volumes at the isolated pads are the same whether it is routine or developmental drilling. However, fuel volumes can differ for co-located pads with a major stationary source on the same pad as the well line, whether you are doing routine or developmental drilling.

Mr. Thomas continued with the presentation. There are other details to be worked out, such as what notifications submissions and requirements. We talked about monitoring methods. The expectation is daily records would be kept, but we have to work through the reporting method.

The floor was opened for questions and comments.

(The telephonic connection had been lost sometime during the discussion. Mr. Turner reconnected with GoToMeeting.)

Mr. Thomas reviewed the portion of the presentation the telephonic participants missed. Details still need to be worked out with the minor general permit related to notifications. Those include the initial notifications, notification of amendments, and notification of deviations. We need to work out how to monitor daily fuel use and we can build upon previous permits for that. We need to specify the daily recordkeeping requirements. The final bullet is amendments.

(The telephonic connection was lost.)

Break from 2:09 p.m. to 2:15 p.m.

Mr. Turner called the meeting back to order at 2:15 p.m. Problems with GoToMeeting were resolved.

Mr. Thomas continued with the presentation. The last bullet point deals with the amendment process, which still needs to be written into the program. For example, at the beginning of the year, information on the annual drilling program is submitted. If the decision is made that more, or fewer, wells will be drilled, there would need to be an amendment process.

Mr. Brower asked about adding and/or deleting authorized operations and the amendment process. Once you are authorized to proceed, you adjudicate your project. That means you are authorized and have a permit to proceed with drilling, as well as accepting contracts from oil companies. He asked if the general permit guidelines were broad enough to allow the drilling campaigns to proceed as long as the excursions were not exceeded. Mr. Thomas said the

amendment process in the last bullet was not for excursions, but for the correct number of wells that would be drilling in a year.

Mr. Thomas continued with the presentation. The committee discussed additional considerations. The first bullet was operations outside of the North Slope. The Cook Inlet modeling has not been submitted and the daily fuel thresholds agreed upon. We need to discuss how to handle the application for a general permit within a Title V or PSD major sources, which should not be very complex. If we operate a drill rig within a Title V source, the Title V source's permit has to have all applicable requirements. We discussed adding to the stationary source's Title V permit, something like a general requirement to comply with all general permits issued for operations on the source. Then we discussed how to address operations that do not qualify for the general permit and decided the simplest approach might be keeping the existing permitting program in place for those.

The floor was open to questions and comments.

Mr. Kindred said that although they were still in the process of doing the modeling for Cook Inlet, they assumed that the programs for Cook Inlet and the North Slope would be similar, with the exception of the daily fuel usage.

Mr. Brower asked what the next step would be for the committee. Mr. Thomas said the general permit process still needed to be drafted and taken through the public comment period. Mr. Kuterbach said slide eight was items that needed discussion from the overall workgroup, including operations outside of the North Slope, and the process for moving ahead on single general permits.

Ms. Koch suggested having parallel tracks. The Technical Workgroup is working on the Cook Inlet technical information that would form the basis for the future Cook Inlet permit. The group has agreed on a general permit approach for the North Slope. One option would be to move forward with the general permit for the North Slope while waiting for the Cook Inlet technical support. Mr. Thomas agreed that moving forward with the North Slope general permit, with an eye toward amending it once the Cook Inlet data was received seemed like a good approach. Mr. Kuterbach, Mr. Munger, Mr. Brower, and Mr. Kindred concurred.

Ms. Koch said Mr. Schuler had indicated it would be six weeks until DEC received the Cook Inlet modeling, which is the beginning of the process. If the committee moves forward on the general permit for the North Slope, it might go to public notice before the Cook Inlet technical information was evaluated. Mr. Kuterbach said time for EPA approval would also have to be added to the timeline. Mr. Munger said there was a good possibility that the technical data from Cook Inlet would be received before they got the EPA approval for the general permit concept.

In response to Mr. Munger, Mr. Thomas said AECOM, Tom Damiana and Tiffany Samuelson, was doing the Cook Inlet modeling. They also did the North Slope modeling.

Mr. Kuterbach, after hearing no objection, said committee's decision was to move forward with preparing a draft general permit, specifically for the operations covered by the technical analysis already completed for the North Slope. He then discussed Title V sources and PFD major sources. Title V permits need a simpler environment to comply with general permits, so the path should include compliance with the applicable requirements. The Title V permits have monitoring, recordkeeping, and reporting for the applicable requirements, which needs to be considered when drafting the general permit.

Mr. Bray said anything operating under the scope of Title V permits have to meet the requirements. It can be done two ways. You could make sure the general permit meets Title V monitoring requirements or there could be a provision in the Title V permit that says any portable oil and gas equipment operation has to meet the general permit and follow the additional monitoring requirements.

Mr. Thomas questioned what Title V requirements would not be satisfied in a minor general permit. He felt the type of monitoring in recently issued portable oil and gas operation permits, as well as the recordkeeping and reporting requirements in those permits would satisfy the Title V requirements. Mr. Kuterbach discussed Title V monitoring requirements. He wanted agreement before moving forward if they wanted a general permit that meets Title V so there would be no monitoring conditions in Title V permits or a minor general permit with monitoring supplemented with a Title V permit as necessary. Mr. Thomas felt it would be most efficient to keep it simple. Mr. Bray asked if there would be any other generally applicable requirements that would apply to the equipment covered by a general permit that would not be written into the general permit. Mr. Kuterbach said they were not contemplating incorporating the SIP emission standard into the minor general permit. The SIP emission standards do not apply to the drill rig industry, but to heaters and boilers. Those are already covered under the Title V permits of the different sources. We would have to make it clear that those general SIP standard requirements in the Title V permit apply to all boilers and heater, including those temporarily under the general permit. Mr. Bray questioned if the general permit would include and function as a standalone Title V permit. Mr. Schuler asked if this were pulled into Title V would increments be an issue. Mr. Kuterbach said increments would not be an issue, because we are not permitting a transportable source under Title V. It would be Title V conditions for the stationary Title V source, which he explained. Mr. Bray said it was like an approved alternative scenario for the stationary Title V source.

Ms. Koch asked about the operational flexibility component. If the new general permit for the North Slope meets the Title V conditions, it might offer more timeliness and flexibility for the industry from the standpoint of already being covered in the minor general permit versus going through the process each time. Mr. Kuterbach said there were a lot of elements in play on this issue. He discussed a minor permit with and without Title V requirements.

Mr. Thomas felt the minor general permit should be kept as simple as possible with monitoring, recordkeeping, and reporting that satisfied the Title V requirements. However, Title V requirements outside of monitoring, recordkeeping, and reporting would be handled by the

stationary source's Title V permit. Mr. Kuterbach said he could do it either ways as the permits manager.

Mr. Brower asked if drill rigs had different components that required different types of permits. Mr. Thomas said there were different components on a drill rig that were treated under different regulatory regimes, so to speak. The engines are treated specially, but the heaters and boilers are treated as stationary sources.

Mr. Kuterbach asked if the committee agreed to a minor permit, with the minor permit monitoring fitting within Title V requirements. When there are no other mandatory Title V requirements in the general permit, we would rely on the stationary source as an alternate operating scenario or some other mechanism. Ms. Koch concurred. Mr. Thomas agreed, with the clarification that general permits are not freighted with requirements that do not apply when being used on outside Title V sources.

Ms. Mason expressed concern that Title V permit renewals were often delayed, and they would not be able to drill at Title V stationary sources until the permits were amended. Mr. Kuterbach said they would have to evaluate the modification occurring on the Title V source to see what process would be necessary to amend the Title V permit. Operators with significant modifications under the Title V rule would need to get a certificate modification issued before commencing operations. However, if it fell under the minor permit rule, you operate at your own risk while the minor permit amendment to the Title V permit was being processed. Mr. Thomas said stationary source Title V permits could be as simple as the addition of conditions to comply with the alternative operating scenario, which would be the minor general permit. It appears to be an administrative amendment that once notification is submitted, the application shield would cover you and you could move forward. Mr. Kuterbach said it would not be an administrative amendment, because you are not changing the permit in an administrative way, but adding a new requirement. At the minimum, it would be a minor permit amendment for Title V, but not a significant permit amendment. We have to look at Title V rules very closely.

Mr. Thomas felt the Title V issue was important enough that there needed to be more time to review it. He suggested having the Options Committee, or a subcommittee, meet in the next three to four weeks to discuss the issue and make a recommendation to the full committee.

Mr. Kuterbach asked if they wanted to have the general permit satisfy Title V or have the general permit only satisfy Title V for the unique conditions imposed by the general permit. Ms. Koch said they were beyond the scope of what they were trying to accomplish, which was operational flexibility for drill rigs and the general permit. There appears to be agreement to include the monitoring and recordkeeping unique to the permit which apply to Title V. Mr. Kuterbach said the question was do we get the minor general permit done and then have a separate track for this aspect of the Title V approach. Mr. Thomas did not feel that was a good approach, because most of the drilling occurs within currently defined Title V sources.

In response to Mr. Kuterbach, Mr. Bray said the EPA was working on the definition of a source for oil and gas operations, but nothing has come through in writing yet.

Mr. Thomas felt the Title V issue would substantially color the minor general permit issue. He suggested holding another meeting to work it out, with an eye toward the goal of operational flexibility and reducing the burden on the drilling rigs.

Mr. Turner summarized the discussion and listed the three action items. The next step is to have the Options Committee look at the Title V requirements, particularly for monitoring and recordkeeping for minor permits. We can continue with approval of the modeling with EPA. We can continue to advance Cook Inlet's technical aspects. The technical aspects of the Title V need to be resolved before we can advance. Ms. Koch agreed with the action items. She recommended that the Options Committee meet and resolve the Title V issues. Then the main workgroup would hold a short meeting to discuss their work. Mr. Kuterbach noted that he would have to do some research on the Title V issue, but he felt the subcommittee could meet in the next four weeks and have a resolution within six weeks.

Ms. Koch asked if there were any Main Workgroup members with concerns or comments on the approach of the Options Committee meeting within four weeks and having a resolution within six weeks. Then the Main Workgroup would meet so the Options Committee could report on their decision. There were no concerns or comments.

Mr. Turner discussed the organization of the upcoming meetings. Ms. Smith would send out an email to the Options Committee on proposed meeting dates. After a decision was made, a meeting would be scheduled with the entire workgroup.

Ms. Koch thanked everyone for attending the meeting. Although not all of the decisions were made, we have made substantial progress and have a path forward.

The meeting adjourned at 3:02 p.m.