

**Virginia Solid Waste Management Regulations
9VAC20-80
Amendment 5 Technical Advisory Committee
Meeting on February 16, 2006
Meeting Notes
Facilitator: Steve Dietrich**

TAC Members Present

Ron Birkhead--Virginia Dominion Power
Jeff Burrier--VWIA--Allied Waste Industries - morning only
David Graham--Kaufman & Canoles
Michael Isper--Virginia Department of Transportation – until 2:55 pm
Larry Land--Virginia Association of Counties - 10:25 am until the lunch break
Ray McGowan—SWANA--Allied Waste Industries
Shawn Davis--DEQ Waste Division; technical representative to TAC

TAC Members Absent

Michael Town--Sierra Club, Virginia Chapter—absent
Lisa Guthrie--Virginia League of Conservation Voters--absent

Others in Attendance

Bob Wickline
Leslie Beckwith
Jeffery Fantell, Joyce Engineering Co.
Ray York (Amelia)
Dave Neil Zahradka (DEQ)
Channing Martin (Williams Mullens)
Mr. Mark Bingham (Republic Services)
Dick Sedgley (Aqualaw)
Dick Cheliras (SPSA)

Today's meeting notes:

The meeting started at 10:12 AM with an introduction by Steve Dietrich. Steve handed out copies of the regulations, the NOIRA background document, and the Advisory Group Policy to those on the TAC who hadn't already received them. Everyone present introduced themselves.

Mr. Dietrich asked if they wanted to see the notes before they are posted on Town Hall or etc. Mr. Isper said he did not have a preference. Ms. Beckwith explained that other TACs had given members 3 business days to review the notes before they are posted on Town Hall. Lunch and meeting times were discussed. In response to a question, Mr. Dietrich indicated that they could decide later if another TAC meeting is necessary following the meeting on Feb. 17. The committee agreed that an open chair format would be used with time reserved at the end of discussion of topics. The committee noted that the NOIRA comments ended Nov. 4, that proposed regulations would be drafted by May 4 and there would be a 60 day comment period following the board's approval.

Then Mr. Dietrich moved on to look at the NOIRA. Mr. Dietrich asked if the TAC would like to prioritize the bulleted items, and whether they had any priority items.

Mr. Birckhead indicated he is most interested in keeping the status quo on coal combustion exemptions and exclusions (CCB). Mr. McGowan said to go down the bulleted list as written in the NOIRA.

Exemptions and exclusions—(see Substance section of NOIRA)

Mr. Birckhead said to keep the CCB section on exempt and exclusions as it is. Mr. Davis wanted some clarity and consistency to the exemptions and exclusions format. He would like to move all exempts/exclusions, which are peppered throughout the regulations, to one section and to make sure the explanations are clarified (150--exclusions and 160—conditional exemptions). Mr. Burrier asked if Mr. Davis is looking at changes to 60 (applicability). Mr. Davis said there is room for clarity to 60 E. (conditional exemptions) under applicability. These are practices that are exempt from the regulations that should be reconsidered. As an example, in E7, we need to clarify that the material shouldn't be "contaminated." He also noted that there are outdated citations to regulations, standards and guidances (soil amendment), there are exemptions that are no longer applicable, and there are unclear requirements related to storage provisions, contaminated soils and "contamination" as a term.

Mr. Burrier suggested that "uncontaminated" may relate to "not man made." He raised the possibility that certification could be made for uncontaminated materials. Mr. Birckhead asked about the E7 exemption with regard to whether rebar in concrete should be considered contaminated. Mr. Davis asked Mr. Birckhead for his opinion. Mr. Birckhead said it should not. Mr. Burrier asked what VDOT does with rebar in concrete landfills associated with its work. Mr. Ispert didn't know. Mr. Burrier suggested that we need to find out before we make any clarifications here. Mr. Davis said on the other hand, we don't want the landfills filled up with clean dirt; we also want to look at reuse and recycling.

Mr. Burrier then went on to ask the definition on "contaminated" here—the levels. Mr. Davis agreed this was a good question and said there are petroleum standards for contaminated soils, but it looks like the regulations don't address anything other than petroleum standards. Mr. Ispert agreed—he said VDOT is comfortable with the petroleum standards (within the Storage Tank Program Technical Manual), but he agrees with Mr. Burrier that the definition of "contaminated" needs a closer look. Mr. Wickline asked Ispert to clarify his reference to the waste guidance on petroleum contamination. Mr. Ispert confirmed it was a Waste Division guidance he was talking about (the Storage Tank Program Technical Manual),. Mr. Graham asked if Mr. Davis wants to move 700 to 160. Mr. Davis said yes. But Mr. Davis went on to say that Mr. Burrier has a point with his definition concerns. Mr. Burrier suggested that similar to special waste disposal procedure, we could write an exclusion that doesn't include contaminated materials. Mr. Davis replied, why not just define the terms of the exemption (e.g. contaminated), rather than to set up a special waste review procedure that would require additional effort or evaluation. Mr. Burrier said he would like to avoid going into some complicated regulatory definition of "clean." Mr. Birckhead said we don't really know how much of this type of material (60 E7) is involved—he suspects it is of low quantity. Mr. Davis said that is more than you might think. Mr. Birckhead asked if it goes to a landfill or otherwise applied to their land somewhere. Mr. Burrier said that

he has seen such soil used as fill and that is where the question arises. Mr. Davis agreed. Mr. Davis expressed that he would just like some clarification.

Mr. Dietrich pointed out that the committee had only focused so far on E5, petroleum contaminated soils, and E7, concrete/rebar, etc., but that there are others. Mr. Isper agreed and said VDOT would like to include a new issue—burial of animal carcasses (e.g. deer, but also dogs and cats) on right of ways rather than going to a landfill. Mr. Isper said Texas is the only state that has such an additional exclusion—burial on right of way, no mass graves, etc. Mr. Wickline asked if an exemption of 1 deer per acre would be a good provision (Mr. Isper had mentioned that up to 20 deer per week are killed by traffic in some areas was in the range he was looking at in terms of statewide kills). Mr. Isper replied that it would be complicated to base it on acreage. He mentioned 40 miles as a possible practical distance from landfill facilities to qualify for road side burial. Mr. Burrier asked about the practicality of burial by hand vs. use of a backhoe for burial (vs. going to a landfill). Mr. Isper said that it would be buried by hand. Mr. Dietrich commented that it is similar to a farmer burying his dead cow. Mr. Davis confirmed that we get a lot of interested calls on this topic and asked Mr. Isper if he'd looked into composting. Mr. Isper said most of his sites are too pushed for space to use composting. Mr. Dietrich agreed that composting would probably be more complicated than just taking the carcass to a landfill. Mr. Isper said the prevailing practice would be burial or either along or off the roadway if landfilling, composting, or rendering was not feasible. He also indicated that sometime carcasses are left in the wooded areas to decompose naturally.

Mr. Graham asked for a clarification of the TAC's role was in the day's meeting. Does DEQ already have the authority to streamline the regulations as Mr. Davis had been discussing, and if so, what impact does the TAC's discussion have on the process. Mr. Davis responded that DEQ doesn't want to proceed without consultation with the TAC. DEQ would like to streamline the solid waste regulations, set understandable standards, and clarify what is meant in the various sections (e.g. exemptions and exclusions) so the regulations make sense. Also, up to now, we've had a lot of guidance on how to proceed with various issues, but it hasn't been incorporated into the actual regulation. The aim is to improve the clarity of the regulations in these areas. Mr. Dietrich pointed out that we also have the opportunity to have the regulated community's input in how we proceed with these regulations. He said that we aren't limited in what we can do today.

Mr. Burrier said that under Amendment 3, DEQ had provided a working framework for the regulation changes; this discussion appears more like a brainstorming session today. Mr. Burrier asked if the TAC would have the opportunity to review the draft language. Ms. Beckwith replied that they would during the comment period. Ms. Beckwith reviewed the regulations writing schedule and DEQ policy. She indicated that DEQ is looking for the TAC's input and consensus. She also explained the opportunity for white papers if consensus is not reached. Mr. Wickline further explained that regardless of what consensus is reached, the Director and Board could make changes. Mr. Graham said this explanation helps him, because it clarifies what the committee is trying to accomplish.

Mr. Davis explained that the Permit Efficiency Committee had suggested that DEQ clarify its regulations (rather than to rely so much on guidance). That's why we would like to proceed with

these clarifications, so the regulations are streamlined and make sense. He indicated that in some cases redundancies need to be removed, the regulations structure needs to be brought up-to-date and streamlined, the patchwork of fixes that have developed over the years needs to be revised in a consistent manner, and the regulations need to shift from a permit issuance focus to more detailed, substantive regulatory standards. Mr. Dietrich and Ms. Beckwith pointed out that the NOIRA list was developed over the years from suggestions by the RO's (for Mike Dieter, formerly of DEQ). Mr. Dietrich and Mr. Davis pointed out, in general, that there are additional opportunities for the TAC to improve the regulations; it's not just limited to what's in the NOIRA list. Mr. Davis favors uniform and consistent regulations for landfills and other waste management facilities. This can be achieved by clarifications to the regulations so they make sense and work (for example, clarification of operating plan requirements).

Mr. Bingham (public) said it would be better to develop a universal approach for day to day operating issues, etc. in the regulations, including operation plans. Mr. Davis and Mr. Bingham agreed this is true for safety plans as well as operating plans. Mr. Bingham said that other places he has worked have permits with 5 year renewals (unlike Virginia - which has no enddate). Mr. Davis noted how DEQ currently operates under the 10 year permit review. He then moved on to discuss gas monitoring - pointing out that we have extensive writeups on groundwater monitoring, so why not on gas monitoring and leachate collection (freeboard in tanks and impoundment, alarms, etc.)? There is extensive guidance on both of these issues that needs to be incorporated into the regulations instead of negotiating standards during the plan or permit review/approval process. Mr. Burrier suggested that the advantage of the guidance documents is that industry standards change and technology changes, so you don't want to roll all of the changing material into the regulations. We just need to use the guidance to tweak things. Guidance is fluid. Mr. Davis agreed that guidance is important. He said we don't want to change policies, but rather the goal is to clarify the regulations. Mr. Davis said this is his interest and not to regiment all technology in the regulations.

Mr. Dietrich moved on to ask if there are other categories we need to touch on in Exemptions and Exclusions. He also opened up the discussion to the public.

Mr. Zahradka (public) said that an exclusion for burial of a single cow or a single horse on a small farm would be appropriate. He agreed with Mr. Davis that was an option, but that these mortalities were in small numbers making composting impracticable. Mr. Wickline asked Mr. Isper what the practical depth for burial for VDOT's carcasses would be. Mr. Isper answered 2 or 3 ft. But he said VDOT's first attempt is to take it to a landfill. Mr. Wickline asked when shoring would be necessary. Mr. Isper said he is not looking for depths requiring shoring. Mr. Burrier suggested animal carcasses could be heaved across the tree line rather than buried, when access to a sanitary landfill couldn't be accomplished. Mr. Isper said this is essentially what VDOT is doing now, but they would feel more comfortable if the language was developed in the regulations.

Mr. McGowan suggests that VDOT just keep the process that they are following. Mr. McGowan suggested that putting it into the regulations would create unnecessary excitement. Mr. Burrier suggests "move carcass" rather than "burial," etc. Mr. Birckhead pointed out that it could be viewed as illegal if a change isn't incorporated into the regulations. Mr. McGowan pointed out

that it could be handled in guidance. Mr. Dietrich concurred that there is more flexibility if the language isn't included in the regulations. Mr. Davis said when he gets calls on the carcass issue with farmers he recommends 1. rendering facilities, 2. composters, 3. take it to the landfill. Mr. McGowan pointed out that many regular citizens would move the carcasses in VDOT's case. Mr. Isper then said that maybe silence on the issue is best, or to leave them to guidance and agreed that VDOT could take this into consideration for the future with DEQ. As a further concern against incorporation into the regulations, Mr. Isper pointed out the possibility of cutting underground lines with side highway burial.

Mr. Martin (public) said rebar should be included in concrete exemption in E7. As for the contaminated definition, he said we should be careful about opening that door—the land disposal limit standard would apply. Mr. Burrier said, however, that many contractors look for exclusions in the regulations as loopholes. Both Mr. Martin and Mr. Burrier agreed the devil would be in the details. Mr. Burrier said there are shades of gray, but he thinks it would be a good clarification.

Mr. Dietrich moved on to Mr. Birkhead's CCB concern that he had expressed before lunch. Mr. Davis looked at the regulatory provisions, 9VAC20-80-150.E.2.(a).(8). Mr. Birkhead said they are building a carbon burnout facility which will get a lot of mileage from this provision. Mr. Davis said DEQ is interested in continuing to support this exemption. Mr. Davis went on to look at 160.A.3 and 160.B, and asked if Mr. Birkhead had used these provisions very much. Mr. Birkhead answered no. Mr. McGowan said rather than flipping pages here, he just seconds Mr. Davis's idea of putting all exemptions/exclusions in a single section or part of the regulation. Mr. Davis summed up that he is okay with keeping the CCB exemptions.

Mr. Davis went on to discuss section 150.J. and that it needs clarification between fuels and fuel products. Some woods may not actually be fuel. Also with 150.K, burning of wood, there are contamination concerns in that section, What about plywood, and treated wood? Waste derive fuel needs a permit to burn. Mr. Burrier asked isn't this more a function of air permits? Mr. Dietrich agreed that Mr. Burrier generally is right, but that what Mr. Davis is dealing with are areas where they don't have to have an air permit. Mr. Davis said we just want clarification. Mr. Burrier suggested parsing out the unpermitted burners in the language. Mr. Davis pointed out that the issue still falls to DEQ Waste Division in the absence of an air permit. Mr. McGowan said he is unsure how to write regulations that requires a Waste permit but not an Air Permit for the same issue. Also, section 160.A.4 needs clarification according to Mr. Davis. Neil said VDACS would be coming to the TAC meeting on Feb. 17, and the committee should hold off future discussion of this issue until then.

Adjournment for lunch was at 11:48 and the committee reconvened at 1:08 pm.

Mr. Dietrich moved on to ask for questions about open burning under Open Dump Criterion 9 VAC 20-180-180.B.7 (listed in the NOIRA). Mr. Dietrich asked what we should agree to here, Mr. Davis said he wanted to move the section to the exemptions/exclusions area. Mr. Wickline explained that open burning exemptions would probably be best in section 60. He noted that new air regulations would go into effect soon and agreed more closely with Waste Division

regulations than in the past. However, waste regulations would likely not allow off-site burns although the air regulations may allow the practice. This is because waste regulations need to consider local requirements and neighborhood impacts such as traffic to the site. Ms. Beckwith mentioned that many open burning issues are regulated by local ordinances, but Mr. Dietrich noted that many localities are reluctant to enforce standards. Mr. Burrier asked about burning of household garbage by landowners. Mr. Davis said EPA has a burn barrel policy to allow them. Mr. Burrier said that burning occurs even where pickup is available. Mr. Davis said it is handled on a nuisance basis. Mr. Wickline said EPA's website warns against burn barrels as a health hazard, so it is hard to endorse them if there are other options. Mr. Wickline asked why ash from burn barrels is brought to landfills. Mr. Burrier said that they don't want the mess in their yards from burn barrels. Mr. Wickline asked if they should require that the burn barrels be mesh containers, to get better combustion. Mr. Dietrich and Ms. Beckwith questioned how it could be enforced. Mr. Dietrich and Mr. Burrier agreed that we might not want to get into the burn barrel issue.

Public Involvement

A discussion arose about the intent of the NOIRA item for public involvement. The speculations focused on the concept of the permit applicant notifying DEQ when a local governmental hearing was held to discuss a facility. This was thought to include preliminary zoning hearings and other dates that were not believed to be pertinent or easy to track. Mr. Bingham, Mr. Burrier, Mr. Graham, Mr. Dietrich, Mr. McGowan and Mr. Davis discussed the issue on several points, but remain unclear on the intent of the NOIRA. Mr. Dietrich asked Ms. Beckwith and Mr. Wickline to get the bottom of this issue before we come back tomorrow. The NOIRA was intended to address hearings the permittee is to hold at the local level about the facility. The desire was that they notify DEQ, which would then place a note with the particulars on its public website, thereby apprising the public of the hearing in advance.

RDD provisions

Ms. Beckwith suggested postponing the issue until the next day to have a chance to review federal regulations. Mr. McGowan asked about methods to control run on. Mr. Bingham said that Mr. McGowan was right, it looks like use of a bioreactor. Mr. McGowan asked what we have to go through for alternate liner demonstrations (particularly when they've been demonstrated before). Mr. Burrier hoped that in DEQ's writing of this section it would make clear but flexible as in 40CFR258. Mr. Cheliras (public) asked isn't this already required in a Part B application? Mr. Dietrich said yes, but part of it is to involve the pilot project demo. Mr. Burrier said there had been such pilots before at Charles City, Roanoke and elsewhere, but he saw this as a more flexible way of getting to try some new ideas. Mr. McGowan said he's all for it, but he wants us to look at the details and any unintended impacts. Mr. Wickline asked if we really want this to allow all experiments. Mr. Davis agreed that DEQ should have criteria for how we gage performance, etc. Mr. Isper mentioned the treatability study criteria under RCRA as a model. Mr. Burrier suggested that DEQ look at 40CFR258 for further indications. Mr. McGowan suggested that we need to allow demos that have worked elsewhere to work here. Mr. Dietrich asked how many demos are enough and when has it been demonstrated enough in other settings. Mr. Wickline asked how do we know, how do you decide? Mr. Sedgley (public) said DEQ could identify that it worked in the demonstration performance monitoring and progress reports. Mr. Burrier agrees with Mr. Dietrich that DEQ needs to decide when it has been decided enough – for example he cited the case of Posishell (alternate daily cover material). Mr. Davis said that if you're going to try something new, why try it on multiple sites; the purpose of RDD is to develop methods, data, etc. to show that your process works. Why should you replicate it multiple times. Mr. Burrier answered while there is a need for multiple tests, it is because there are different soil textures, anaerobic, aerobic, and other site characteristics. Mr. Burrier said there are nuances to it. Mr. Davis asked what the goal of RDD is. Mr. Burrier answered it was to set up a standard. Mr. Davis said you should ultimately develop regulations to incorporate the proven standard. Mr. Burrier said this RDD is a good thing. Mr. Dietrich agreed this is a good thing, DEQ just needs to look at details further.

Intake rates

Mr. Martin suggested that waste intake rates are controversial. So this is a DEQ concept and DEQ should lead off by explaining the impetus for this. Will rates be quantified on tiers of the factors in NOIRA Mr. Davis explained that intake rates affects facility design elements, plans, and service areas, and that DEQ found that some facilities have disregarded their intake rates. He described road hazard problems, insufficiencies in equipment and resources, and early utilization of landfill resources. How do we determine if the site operates as it is designed? Mr. Graham asked what DEQ does if a facility exceeds its intake rate (or how much is too much). Mr. Davis answered that there is an enforcement process that is followed. Mr. Davis said this plugs into our recycling program—trying to conserve waste and landfill space. Mr. Wickline pointed out that needs determination and roads evaluation requirements point to a need for rate to be specified and the regulations are to address requirements in the Statute. Mr. Bingham asked then why do we need further regulation on this. Mr. Wickline responded that DEQ needed it for the sake of clarity.

Mr. Bingham suggested that the discussion should be on whether the facility has enough equipment, adequate road ability, etc. without being married to a particular number. He said he just went through a major modification and had to commit to exact equipment and road numerical requirements on each rate of volume. Mr. Bingham said he would be determined as noncompliant if he didn't have enough equip, road numbers, etc. under the existing regulations structure. Mr. Graham asked if this is typical for Virginia. Mr. Bingham said his permit was modified under the existing structure in the framework of the current concerns and that it is probably typical for what would be done to other facilities now. Mr. Davis said this item is focused on discussing an average and a maximum intake rate in the regulations.

Mr. Bingham said that the permit applicant says this is the number, and the permit verifies it or not in the approved permit or modification. Mr. Fantell (public) asked what governs the maximum rate. His concern is the change in the number during the life of a facility. Mr. Davis agreed such rate changes should be a permit modification through the amendment process. Mr. Graham asked shouldn't the design best prepare the facility for changing rates and be more effective than the regulatory fix? Mr. Bingham noted that the inspector's form is Y/N on whether adequate equipment is available to handle the rate at any point.

Mr. Wickline pointed out that need determination is assigned in the statute and requires a rate. Mr. Burrier said need is on capacity and not on rate. Mr. Wickline noted that the suitability of the roads to the facility are evaluated in part based on rate. Mr. Burrier went into the history of legislation mandating caps on daily intake and the industry's court battle under Interstate Commerce. The language under the needs capacity was carefully crafted to avoid specifying a daily limit in the permit. Over time, if the host agreement has a daily limit, the permit has one. New permits are picking up the daily limits. The host community agreements are therefore the driver. We need to be careful in recognizing this as the origin. This is a sensitive issue not to cross lines and linking daily and maximum intake rates with the rest of it. Mr. Wickline said he was trained in approaching the problem as unit operations and that landfills are also unit operations. Just because we weren't considering them 20 years ago doesn't mean that it isn't important now. Even highways are rated by speed limits.

Mr. Burrier said that with landfills you can do more with certain equipment; therefore the regulations need to be careful not to put a landfill in a box. It is hard to put somebody in a set box, particularly when you can do more depending on the configuration. It is too constrictive to put one formula in the permit. Mr. Wickline indicated that DEQ was using it as a guide to when the permit should be amended. Mr. Bingham felt that you put a lot of burden on both the facility and the inspector by dictating day to day changes/work face, etc. Mr. Wickline noted that facilities better be prepared to tell DEQ what you are going to do if you are to be accepted by the community.

Mr. Martin asked why you can't have operational parameters in the permit rather than daily/maximum intake rates. Mr. Davis pointed out the intake rates determine work face size, equipment needs, etc. needed to avoid environmental problems. Mr. Davis and Mr. Bingham discussed the subjectivity of determining vector problems. Mr. Davis said Mr. Burrier's comments were interesting because intake rates are already required or dictated by host agreement or service area. If you say X tons, you're in the box. Mr. Burrier—the issue is enforcing “approximately.” Mr. Davis said host agreements are not required at all facilities (e.g.,

public or captives) and we can either stay in the existing box or build-in some flexibility by pursuing average and daily maximum rates to accommodate the real-world situations of daily/weekly fluctuations. Mr. Dietrich summed up that average and peak cover most of the year but you have disaster scenarios.

Mr. Bingham said he takes CDD, stumps and brush and that he took more stumps and brush during Hurricane Isabel. Mr. Wickline pointed out that you have flexibility under gubernatorial disaster decrees during the disaster scenarios. Mr. Fantell asked is the average based on the week, the quarter or the year. Mr. Wickline said daily. Fantell asked over what time period? Mr. Davis said DEQ still have to look at that. Mr. Martin added, philosophically, DEQ's mission is to protect human health and the environment. Mr. Martin asked can't you address this in some other way than to address intake rates? Mr. Davis said his thought is to allow more flexibility. Mr. Dietrich said we need to get back to how it is enforced, how many strikes, and how do you get back into compliance—this we can think about in the future. Mr. Burrier clarified that all the permits had approximate limits in the appendices which weren't enforced in the front of the permit as a daily limit. This has evolved over time to enforcement of the design limits in the appendices. Mr. Burrier said Mr. Davis's position is that now DEQ will use enforcement and this is supported by a court case. Mr. Burrier said he doesn't necessarily agree with Mr. Davis's position that he is pursuing a court supported view to enforce the limits, but that he's giving us flexibility with daily average and a peak.

Mr. Wickline asked the group how they would determine the rate period. Mr. Fantell said the problem is fluctuation. Dick of SPSA said he has a problem with fixed numbers that remained fixed. He likes instead the matrix of roads etc. that limits the operation and gives the operator the flexibility to decide how to operate within it (rather than daily avg and max rates). Mr. Wickline said we want you to define your own matrix plus other factors and do the homework up front in setting up the rates. Mr. Cheliras and Mr. Bingham said they want the matrix in the permit. Mr. Bingham said amendments take too long to get to make the changes that will be needed. Mr. Bingham recommended getting seasonal averages for the rates. Mr. Davis said that figuring in the matrix makes sense, allowing for flexibility. Fantell asked how we can get this flexibility in the regulations. Mr. McGowan said host agreements require maximum tons per day. Mr. Davis and Mr. Burrier pointed out only the private sector has host agreements, roughly 15% in Virginia.

Mr. McGowan said adjusting the daily intake rate should be a minor permit amendment so it moves more quickly and businesses can adapt quicker. As to the period for the rate, Mr. McGowan is concerned about the process that will be applied. He said it should be performance based rather than tied to a fixed number; it is too specific in the permits. Mr. Davis stated all operating standards should be clearly established and if they had legitimate safety concerns, he suggested that they bring forward their health and safety issues for consideration in during the permitting process. He also said intake rates determine were a major design element for determining, in part, workface sizing to minimize blowing litter, vectors, odors, etc. Mr. Burrier echoed Mr. McGowan's concerns to keep the working face performance based. The permittee has just enough incentive to keep it smaller, but when weather dictates it can be bigger; hold us to a performance standard rather than size.

Mr. Davis asked what was too big. Mr. Burrier answered what you can't close that night. Mr. Davis inquired but during the day, odors, seagulls, litter problems etc., how do you manage it to keep these from being problems? Mr. Burrier said he wants working face as small as possible, but there are times that he needs it bigger. Mr. Davis stated that odors also have become a problem. Mr. Davis said intake rate standards should be blend of substantive/performance-based requirements, but it should be presumptively derived and not left to a subjective standard. Mr. Burrier said maybe the balance is to strengthen the discussion of the performance standards for work face, etc. Mr. Davis asked what the basis for the work face is, and Mr. McGowan said it varies. Mr. Wickline asked the TAC if they really wanted performance based permit/compliance standards? A regulation could describe collecting litter, for example, and weighing it each day. If too much litter was found, there would be a violation. Violations on windy days would be frequent. Such a regulation would not be a good or desirable regulation. He said he could write such a performance based standard if they wished, but he didn't feel that is what they would really like to see. Mr. Burrier said it seems like you're penalizing responsible operators, we already have performance based permits. Mr. Davis indicated not all facilities have permit standards and DEQ relies on the regulations with are subjective for many issues such as litter. Mr. McGowan and Mr. Burrier agreed blowing wind is a problem, but it is not the fault of the operator. Mr. Burrier indicated a compromise could be to allow alternate scenarios for documented safety concerns and those documented in the records for contingencies. Mr. Davis said he had just been to a facility that failed to keep such records. Mr. Bingham said the notice of violation is either yes or no. Mr. Bingham asked what the waste inspection capability refers to and Mr. Davis said it has to do with the incoming trucks. Mr. Bingham said that is specified in the application, isn't it?. Mr. Davis indicated only for modernized permits. Mr. Dietrich suggested that Mr. McGowan and Mr. Burrier proposed some alternative language.

Odors and landfill gas

Mr. Bingham was concerned about the combination of issues (gas can occur with odor and vice a versa). Mr. Davis said the two were only grouped together for convenience. Mr. Davis asked for details on both. Mr. Graham thought there were set odor standards in the regulations. Mr. Davis explained that gas had some standards, but we are talking about odor as well, which needs some standards. Mr. Davis proposes streamlining the regulations to make them more effective and understandable. Mr. Graham asked if explosive meters were used in the gas regulations Mr. Davis said that such meters could play a part, but the standards are detailed in section 280. Mr. Davis noted that there are inconsistencies between CDD and sanitary landfill standards. Mr. Davis suggests there should be consistency, because methane at either is a problem. Mr. Dietrich said the generation rates may be different. Mr. Davis said the problem is the response rate is at 100% the LEL at facility boundary, that is at an explosive level (even though it agrees w/ the EPA standard). Mr. Davis thinks we need to be preventative with a lower level at the boundary or move the probes closer to the fill. Mr. Burrier asked if we are looking for corrective action plans for gas similar to those for groundwater. Mr. Davis and Mr. Dietrich said yes, the gas plan and corrective action plan criteria should be spelled out like it is in the groundwater section. Mr. Graham asked if there ever has been an explosion on such a facility in Virginia. Mr. Davis said yes in a facility nearby in Richmond. Mr. Davis felt that 260.B.9 is more restrictive. Mr. Burrier said perimeter probes are less visited than structures (which are used or inhabited), so he understood the difference in required levels. Mr. Burrier pointed out that any changes in the gas

limits should be compared to those for municipalities, which would also be impacted, to make sure that they will not be adversely impacted by changing any such limits. Mr. Sedgley agreed with Mr. Burrier on this issue. Mr. Davis said the perimeter limit shouldn't necessarily go down to 25% of the LEL at the boundary, he just thinks the 100% number should be reevaluated. Mr. Dietrich summed up that DEQ intends on streamlining the requirements here to make sure they are most effective. Mr. Davis agreed.

Dick Sedgley pointed out there is a 5 day notification requirement if thresholds are violated in 280.E.1. Mr. Davis agreed. Mr. Burrier agreed that it makes sense to lower the perimeter gas level, to do something proactive here. Mr. Wickline asked if it should be 25% in structures; he suggested it should be linked to technical reasons. Mr. Dietrich and others said the 25% makes most sense and not to change it. Mr. Graham asked if a house had ever blown up in Virginia related to landfill gas. Mr. Davis said not to his knowledge, but they have looked into some potentially close calls. Mr. Davis said DEQ does rely on the fire marshal for close calls. Mr. Dietrich said we are all in agreement here. Mr. Sedgley said he doesn't disagree with tweaking the perimeter number; he is concerned with what you do when you reach the perimeter number level. He would also be concerned about delaying the removal of old landfills from the program just because of certain gas levels. Mr. Burrier suggested marrying the gas regulations to the groundwater regulations to address concerns at older facilities or coming up with some overall technical criteria. Mr. Dietrich said the agreement is to change some of the language, but we need input on what the numbers should be and to see the effect of the changes in threshold for older facilities. Mr. Graham was concerned about creating new obligations. Mr. Davis suggested including the gas concerns for older facilities in the postclosure care section of the regulations rather than in the gas section. Mr. Sedgley agreed. Mr. Wickline differed with Mr. Burrier's suggestion about guidances on technical criteria for gas at the older facilities because it would merely add more guidance to a large body of guidances. Mr. Davis agreed the regulations should be clear and state the expectation(s).

Mr. Davis asked that we discuss odors at this point. Mr. Davis says odors are drifting into the nuisance arena. Mr. Davis referred to the Sanitary landfill section of the regulations at sections 250.C.2.c. and C.13 b. Odors are not exclusive to the work face at some of our facilities. We also have truck loads come in to the landfill with bad odor loads. Mr. Davis pointed out measures that had been taken to control odors. He said it is no longer an emerging issue, and DEQ has formed a task force to address it under the current regulations

Mr. Dietrich said the odor issues in the air regulations are also subjective and there they formed odor panels for subjective evaluation by people. Mr. Burrier agreed it is a subjective issue that is hard to regulate. Mr. Burrier noted that odors, trucks, and litters are the things that give landfills a bad name. Mr. Burrier suggested a first step would be to require an odor management plan to include: how to respond to a complaint, short term acute odors, chronic odors, capping schedules, soil and cover types on-site and effect on gas collection efficiency. Mr. Dietrich asked about how you measure success and how to communicate it to neighbors. Mr. Graham said he has some of these elements in the odor plan being prepared for a new landfill. Mr. Burrier recognizes that they have to address odor to continue business. Mr. Wickline asked how to address odor at transfer stations. Mr. McGowan and Mr. Burrier said this is part of it. Mr. Davis said our community outreach has indicated that odor is a main concern at the facilities.

Posishells (polymers) and some other alternate daily covers are also a concern for lack of odor control.

Mr. Davis would like to define the odor control plan if DEQ can be ensured that it is effective. Mr. Wickline said it is liquids management that leads to odor problems. A desiccated fish doesn't stink. Mr. Bingham agreed that moisture is an important part of the odor problem. Mr. Burrier said it is fluid though; many sites have successful leachate recirculation without having odor problems, and they just have to be aggressive in the gas collection process. Mr. Davis agreed but said he has still identified problems on some such landfills, but he agrees that aggressive gas management is essential. Often it is difficult to compel additional controls when the standards are only specified in modern permits. Mr. Burrier said you have to have a thorough gas extraction plan in the Part B and adequate spacing of active gas wells. Mr. Davis said this is part of the negotiation process for getting a permit. The standards should be clearly spelled out in the regulations so it applies to everyone equally.

At 4:00 pm, Mr. Dietrich said the committee would have to revisit some areas tomorrow and had a lot of additional work to do the next day. He asked that they all arrive on time.

**Virginia Solid Waste Management Regulations
9VAC20-80
Amendment 5 Technical Advisory Committee
Meeting on February 17, 2006
Meeting Notes
Facilitator: Steve Dietrich**

TAC Members Present

Jeff Burrier--VWIA--Allied Waste Industries – briefly in morning and during afternoon
David Graham--Kaufman & Canoles
Michael Ispert--Virginia Department of Transportation
Shawn Davis--DEQ Waste Division; technical representative to TAC

TAC Members Absent

Michael Town--Sierra Club, Virginia Chapter—absent
Lisa Guthrie--Virginia League of Conservation Voters—absent
Larry Land--Virginia Association of Counties
Ray McGowan—SWANA--Allied Waste Industries
Ron Birckhead--Virginia Dominion Power

Others in Attendance

Bob Wickline
Leslie Beckwith – morning only
Channing Martin (Williams Mullens)
Mark Bingham (Republic Services)
Dick Sedgley (Aqualaw)
Dick Cheliras (SPSA)

Today's meeting notes:

Mr. Dietrich mentioned the carryover issues: public involvement (intent to notify DEQ), RDD (40 CFR 258.4 limits), and waste intake (suggested language for average times/peak acceptance rates). Mr. Dietrich said if anyone on TAC would like to provide language for waste intake calculations, DEQ would appreciate it.

Mr. Sedgley requested that screening & grit and condensate derived from landfill gas also be considered. He explained that the current rule is adequate in section 250 re acceptable vs. unacceptable materials. Mr. Dietrich asked the TAC if they would like to include discussion of this issue or go on with the NOIRA bullet list.

Mr. Burrier asked that the committee to delay discussion of HB2192 until after lunch.

Mr. Wickline explained the bird hazard item was a request for military airports to be included with public airports in the regulation of bird hazards. The members concurred with Mr. Wickline's recommendation to include both types of airports in the definitions.

Control of decomposition gases

Mr. Burrier asked to discuss control of decomposition gases because he felt some standard controls are warranted and there are new industry standards that everyone is following. Mr. Burrier said a standard design is warranted based on industry standards (e.g. active gas control, not passive, for post 1993 sanitary landfills and for active gas control for leachate recirculation), but he warned about putting small vs. large landfills into a box. He suggested looking at Subpart WWW of 40CFR40 for New Source Performance Standards for assistance. Mr. Davis said this would be helpful to have such standards (minimum criteria and additional standards as conditions warrant).

Leachate management

Mr. Davis noted that this is a big issue for DEQ; in particular, there is not much detail in 290 of the regulations. The regulations just say you have to have a plan addressing basic elements in the permit. It would be helpful to have standards/criteria (e.g. for tanks, secondary containment, venting of tank, inspections, overflow protection, etc.) to make sure tanks are performing properly. Mr. Davis said that some standards are also needed for impoundments (wave action, excessive rain, freeboard regulations, etc.) and some basic design and control standards would be helpful. Performance standard of existing requirements is based on failure (i.e., don't pollute the surface water). Mr. Davis suggests that it go further to be preventative. Leachate should not be allowed to exit the disposal unit except through the leachate collection and removal system. Same idea should be applied to non-disposal units. Mr. Burrier summed up Mr. Davis's recommendation for minimum standards for clarification. Mr. Davis said some details have been incorporated into modern permits; he thinks they should also be incorporated into the operation section of the regulations. He also recommended there be tank testing standards.

Mr. Burrier asked about the "leachate" definition, i.e. what doesn't work with that definition. Mr. Davis said the problem was that it was not consistent with EPA standard (i.e., EPA does not consider leachate "septage"). Leachate that is pumped and hauled to a POTW is a solid waste, not septage which is exempt from solid and hazardous waste regulations. Mr. Burrier said monthly testing of leachate is a requirement for sending it to most publicly owned treatment works (POTWs). Mr. Burrier suggested an easy solution would be to call it all "industrial waste", because it is not the same thing as "septage". Mr. Sedgley pointed out that leachate handling is a formal process in this area of Virginia and, if trucking of the leachate involves transport of a TCLP waste, it would be a big problem. He said that DEQ shouldn't go overboard by adding on additional layers of regulations here. Mr. Burrier asked if it could be defined "wastewater" rather than "septage" and he asked that Mr. Davis look at the definitions. Mr. Dietrich summed up Mr. Sedgley's comment that we didn't need to do anything with this leachate/septage issue if the controls are already there. Mr. Wickline interjected that it may still be an issue in smaller localities that are not required to have pretreatment programs for their sewers. Mr. Burrier suggested that DEQ might want to check further with representative POTW plants because his company sometimes ships long distance to get to a POTW that will accept such leachate. He would like to keep it in the hands of POTW's if research indicates they're standards are suitable. Mr. Wickline agreed that DEQ should change "septage" to "industrial waste" in the leachate definition. Mr. Davis said further research and a look at related guidances is necessary.

Mr. Burrier pointed out that POTWs often issue permits to the landfills allowing them to run the leachate collection systems with disposal in the POTWs. Mr. Davis indicated direct discharge to POTWs are exempt from RCRA C requirements but reiterated that further research is needed on pump/haul operations. Mr. Burrier requested that the facilities not be burdened with more testing, unless it is based on a conservative frequency and extent. Mr. Davis agreed and indicated he just wanted to bring up the issue that leachate may be a hazardous waste. If facilities use pump/haul operations and don't adequately test, they may be in violation RCRA C generator and storage requirements if tests show the leachate is hazardous waste. Mr. Graham wanted to be sure that one set of parameters would meet both the requirements of the POTWs and DEQ so that redundant sampling could be avoided. Mr. Davis agreed they should be reviewed for adequacy; he wants DEQ to look at all the leachate management issues in the regulations. Mr. Wickline asked Mr. Burrier what testing is going on at his facilities now. Mr. Burrier said it is voluntary but varies from large to small facilities. Bimonthly sampling costs were indicated to be roughly \$1,000 per month. Others gave costs of \$300 per routine sample collected, \$1,000 for POTW test requirement, and \$1,500-2,000 for TCLP test (once every two years). Mr. Bingham said the testing required to send leachate to Richmond's POTW is about the same. Mr. Cheliras of SPSA said the POTW regulations are more restrictive than RCRA's TCLP standards and he thinks we are well covered right now on this issue. Mr. Davis wanted confirmation this was accurate.

Landfill gas condensate

Mr. Burrier said the landfill gas condensate issue is related. He said such condensate can be reinjected at the working face under existing regulations, but it is unclear whether, when the gas is being piped offsite for use and condensate collected along the line, that condensate can be returned to the landfill from which it was derived. He felt point of transmission to point of receipt should be covered under the regulations allowance. Mr. Graham and Mr. Davis asked about whether it is covered under existing natural gas requirements as a product. Mr. Martin and Mr. Sedgley didn't agree with Mr. Davis that landfill derived gas was covered as a product. They favored covering it under the landfill gas regulations with a return to the landfill. Mr. Sedgley said the issue is relevant to the Brunswick landfill. Mr. Burrier said his issue is the same. Mr. Sedgley said these projects (gas as product) will be more common in the future and agreed with Mr. Burrier's characterization of the issue. Mr. Sedgley made the point that he was not talking about other items being added to the condensate, just the condensate itself. Mr. Dietrich asked where it would go otherwise and Mr. Sedgley answered that it would probably go to a POTW. Mr. Burrier agreed that it is a global issue and reiterated his point that condensate along the pipeline should go back in the landfill.

Mr. Martin said no change in the regulations is required, unless the Piedmont Regional Office takes a different view than other regional offices on this issue. Mr. Wickline asked what pipeline distance would be involved. Mr. Burrier said it depended on the economics of the issue; it shouldn't be based on a set distance, instead, it should be based on the origin of the gas. Mr. Wickline asked if there are any reasons why it shouldn't come back to the landfill. Mr. Burrier, Mr. Dietrich and Mr. Sedgley agreed there was no reason. Mr. Wickline suggested DEQ could just stipulate that it couldn't be mixed with other things before returned to the landfill. Mr. Davis defended Piedmont Regional Office's ruling (that condensate cannot be returned to the

landfill after the gas leaves the site). Mr. Davis was concerned that DEQ could become involved in regulating pipelines if we allowed this expansive interpretation on condensate. He preferred to guard against including the pipeline with the landfill since DEQ has no regulatory authority over pipeline operations off-site of the waste management facility. They are regulated under other standards and treated like any other energy pipeline.

Mr. Sedgley asked if there is any environmental reason not to allow the leachate to come back to the landfill of origin. Mr. Davis reiterated his concerns with that leachate and condensate may not pass the TCLP test. Mr. Sedgley said it is a small amount that is being returned, perhaps a barrel. Mr. Davis said the quantity and nature of the material should be investigated before any regulations were changed. Mr. Sedgley asked why? Mr. Martin added that it would keep it as a closed loop system. Mr. Davis said it appears that this would be an expansion of our regulatory domain. Mr. Cheliras (SPSA) said he understood Mr. Davis's view, but that he felt that DEQ should look at other natural gas disposal issues before deciding what to do. Mr. Davis suggested that we revisit the Federal standards and asked if it is disallowed or permitted in any other State. Mr. Sedgley said he was unaware of it being disallowed anywhere else. Mr. Martin said it should be the same stuff whether it comes out at the landfill or down the pipeline. Mr. Davis said he has concerns about the concentrations and also jurisdictional concerns. Mr. Martin asked who owned the pipeline. Mr. Sedgley said it is a contractor generally, but it could be the landfill. Mr. Bingham said it is almost always a party other than the landfill. Mr. Davis said that because it is an owner other than the landfill, it should be under the same requirements as other products. Mr. Sedgley outlined the bases of support for the opposing view. Mr. Dietrich noted a need to sum up our options from the differing views, if the committee wished to revisit this issue, it could.

Public involvement

Ms. Beckwith stated that the advisory group impaneled to help DEQ with issues related to public involvement had asked DEQ to require the facility owners to provide information about earlier meetings in the development of the permit. Mr. Martin said the locality gives public notice of the meetings, clarifying that it is the zoning meetings of which he spoke. Mr. Brockman was asked for which meetings the information was requested. Mr. Davis supported providing this information on DEQ's website. Mr. Martin was concerned that it is the local government's requirement to notify the constituency. Mr. Davis said the devil may be in the details, but he supported relaying this information to DEQ for the website. Mr. Martin said if you rezone land and are developing it as landfill, then those are the ones that should be required. Mr. Brockman agreed to look up the regulations provision over lunch. Mr. Davis and Mr. Cheliras further discussed the pros and cons of such notice. After lunch, Mr. Brockman reported that it was public meetings the owner/operator is required to hold by the regulations for which notice is sought, not other local government meetings. Previously, the owner/operator submits a record of the meeting with the permit application; however, the group wished to know of these meetings before they happen; therefore, they had made the request for website posting.

Major and minor amendments (in table 7.4)

Mr. Davis mentioned that waste intake rates relate to this issue. It seems intuitive that changes of intake rate are significant enough that an amendment needs to be incorporated in the regulations in this table; they reflect a significant workload and should be a major amendment. Mr. Bingham agreed that it is just codifying the existing reality on the subject of intake rates. Mr. Davis recommended looking at all the amendment types in the Table and ensure they are designated appropriately based on their significance. Mr. Dietrich clarified that this is to just make sure they are added to the table 7.4. The TAC had consensus that this was okay.

Time frames for completeness reviews

Mr. Davis explained the need for the change, doubling the time for the completeness reviews. Mr. Wickline said the permitting staff would like to have the requirement removed, and that it is not a statutory requirement. Mr. Bingham & Mr. Martin differed with Mr. Wickline on the total removal. Mr. Dietrich said that because this is in a regulation, it is fixed. Mr. Sedgley said it would be a bad idea for us to depart from status quo, given we are a service industry. Mr. Dietrich stated that going from 15 days to 30 days didn't seem unreasonable to him. Mr. Dietrich and Ms. Beckwith agreed that 15 days is administratively complete, but not technically complete. Mr. Davis pointed out that the permit-by-rule (PBR) standard is 10 days. Mr. Davis suggested that both PBR and the Part A be changed to 30 days for completeness reviews. Mr. Wickline said generally 30 days is adequate for completeness reviews across DEQ. Consensus on the change was reached.

Waste management plan clarification

Ms. Beckwith said this was covered under HB 421. Mr. Cheliras says HB 421 includes PBRs as well. Under section 510 we need to clarify that you do need a plan before permit approval. We also need a modification based on HB 421, local certification that capacity is consistent with the plan under paragraph 1411 of the Code. If not part of the solid waste plan, there is certificate from the regional planning unit that they have initiated modification of the plan to reflect the new solid waste management plan. Mr. Wickline said a change is needed to conform to the Statute. Mr. Martin said it is always good to mimic the statute. Mr. Cheliras recommends that DEQ not use the exact wording of the statute (it crosses jurisdictional boundaries between planning units and the host government and is a problem if they aren't one and the same). Mr. Cheliras recommends that DEQ tie it to the plan holder. Mr. Martin said DEQ can wordsmith. Mr. Wickline said we can't conflict with the statute. Mr. Dietrich said DEQ can wordsmith. Mr. Davis said it is just a clarification item. Mr. Dietrich felt there was agreement on the intent, DEQ just has to get the words right; therefore, and there is consensus.

Landfill reactivation issue

Mr. Davis said some clarifications are needed in this section, for consistency with EPA regulations. The issue revolves around older, unlined landfills operating under HB1205 filling overtop of areas which have received final cover and are closed out. Filling over previously closed areas is not consistent with past operation and the sites are adding more waste into the

unit, building the height above elevations where filling previously stopped. The HB1205 provisions were meant to allow for limited filling to continue in unlined disposal units until new lined units could be permitted and constructed. We are seeing sites now trying to over-extend the life of these substandard sites and not moving waste disposal activities into lined landfills. In response to a question from Mr. Graham, Mr. Davis indicated filling is continuing over the entire closed disposal unit or over a cell or part of a unit previously closed. Landfilling trash on unlined areas is not a sound practice. Mr. Dietrich summed up that the committee is seeking clarification that provides a list that would preclude reactivation of a closed landfill and on this there was consensus.

Background groundwater constituent data during Part A application

Mr. Wickline said the issue is establishing background level of contaminants at a site. Mr. Graham said his client did it for his landfill voluntarily in cooperation with the county. Mr. Sedgley pointed out that currently landfills don't establish background until after the permit is issued. Mr. Davis agreed. Is this to be a siting criteria requirement for refusing a site asked Mr. Cheliras, SPSA, and is this accelerating a whole component of the Part B into the Part A. Mr. Cheliras asked if the wells are drilled and they are bad, do they have to be drilled again. Mr. Cheliras said it doesn't matter if the wells are installed before or after the Part B, because no disturbance has occurred. He was concerned that DEQ would be asking permittees to do something twice. Mr. Davis explained that most of the time people are conducting the surveys up front to ensure that the landfill, etc. will be in the right place; however, he understood Mr. Cheliras's point. Mr. Cheliras said that if the objective is to see if contamination exists, it is best to do it during the Part B. It doesn't matter if contamination is documented during the Part A siting phase. We just want to make sure my landfill doesn't make the contamination worse. Mr. Cheliras said that even to do the background in Part A, there won't be enough time to develop the statistical background required (2 years). Mr. Davis said the intent was not to hold up the landfill development, but to get better information. Mr. Martin said if a snapshot was required you can do in one sampling event, but a snapshot would not be sufficient to develop background. Mr. Ispier, Mr. Martin, and Mr. Davis read the proposed item as requiring one shot. Mr. Dietrich said there is a need to look into what DEQ is requiring; background (2 yrs) vs. a one snapshot. Mr. Cheliras said DEQ needs to do an EIA right now, but it doesn't have to be an upgradient well. Mr. Martin asked if this was a qualitative analysis or a quantitative analysis. Mr. Bingham said that if the information was known up front (one shot), it might help under alternate source determination (ASD). Mr. Martin asked what DEQ will do with the one shot information, what decision will DEQ make. Mr. Davis answered it will be to investigate any sources of contamination in the area. Mr. Dietrich asked if it would lead to determination of how to set up the monitoring network, would the information hold up a Part B, are you building in a year. Mr. Dietrich said we would ask a geologist to come to the discussion after lunch.

Safety Program

Mr. Davis said that the regulations require a safety program, but there is no description of what it has to include. Mr. Dietrich said he sees programs that include safety training, a safety director, equipment inspection and maintenance, agreements with ambulance, etc.; DEQ just wants it to be detailed in the regulations. Mr. Davis pointed out that the safety details in permits are

inconsistent from permit to permit (particularly between one page permits and the more recent permits). Mr. Martin and Mr. Graham asked why safety programs aren't spelled out now. Mr. Graham asked if guidance addressed it. Mr. Dietrich said some are. Mr. Bingham asked about the process and would there be a list of recommended elements. He said he would hate to have a top down directive from the DEQ without input from the facilities. Mr. Wickline explained it would be detailed in proposed regulations and asked Mr. Bingham to provide an example of what he thought should be addressed. Mr. Bingham said they have tailgate meetings monthly and discussion of known issues. Personal protection equipment (PPE) was needed for employees and customers (safety shoes, etc.). Mr. Bingham agreed to share this information with Mr. Wickline. Mr. Cheliras said SWANA has some safety information. Mr. Dietrich said any proposal or draft to comment on would be welcome and there seemed to be consensus on this issue.

PBR compliance with operation plans

Mr. Davis explained that some of the details of an operation plan are in the records, but the necessary, detailed requirements aren't addressed in the regulations. Mr. Davis said it puts compliance in a difficult position since plans may not be thoroughly reviewed or subject to approval for PBRs. Many of the operating standards for various units are subjective and negotiated during each PBR or permit review or approval process. It would be more efficient and effective to establish clear and understandable standards in the operational section of each unit type to ensure consistency and streamline the regulations. General standards have been established over the past decade of permitting activities, they should be brought for as the base standard and expanded on where necessary. Mr. Dietrich asked the TAC for other comments. Mr. Dietrich then recommended that DEQ craft such language and there was consensus to do so.

Permit Denial—500.E.4.

Mr. Martin asked if the item is needed under the Act. Mr. Davis said the Director's decision is not final and DEQ is still subject to Administrative Process Act (APA). Mr. Graham recommended that the word "final" be struck out. Mr. Martin said it is not a final permit until it goes through the entire APA process and appeal. Mr. Martin said it is fine to take "final" out. Mr. Sedgley agreed, as long as we still do the "decision" action in 30 days. There was consensus on this issue.

Clarification of Closure Timeframes

Mr. Davis explained that clarifications and consistency are needed on closure issues. Mr. Burrier said that at sanitary landfills, Part B phasing plans demonstrate what units are open. At closure, they identify units that are capped to release financial assurance requirements. Mr. Davis explained that such information is not available in one page permits and closure plans are not reviewed until final closure of the facility. Currently, there is no requirement to track progressive closure for one page permit sites. Also, there is no requirement to call in one page permits under the 10-year-permit-review. They are 1205 facilities and some are filling areas under final cover which directly conflicts with federal regulations DEQ wants the ability to work with and to progressively close out each unit in sequence at our facilities. DEQ does not

want facilities applying final cover to areas and waiting until the final closure of the facility to review the QA/QC information. This risks finding problems years after they have occurred, costing more to fix and delaying initiation of post-closure care period. The regulations should be clarified to flush out the progressive closure concept so the process is more streamlined.

Mr. Wickline asked Mr. Burrier about his process of closing out the units. He asked if there can be one final cover but different liner series. Mr. Burrier said yes. Mr. Dietrich and Mr. Bingham agreed. Mr. Burrier said there are reasons to do progressive capping but the first units may not be closed, they may be just inactive. Mr. Burrier drew the process he was describing on the chart stand. The cells piggyback and that is why you use a progressive cover. Mr. Davis said this is great if it is all mapped out as Mr. Burrier says, but there are many sites where this type of planning does not exist because it is not required. Mr. Burrier questioned why this was so when the Part B regulations require all of it. Mr. Davis explained that not all facilities go through Part B permitting. Mr. Burrier asked why not call them all in and make them meet the regulations. Mr. Davis said that those are the challenges and that the details Mr. Burrier discussed should be fleshed out in the operating sections of the regulations so it applies to all site uniformly. Mr. Dietrich agreed. Mr. Graham asked Mr. Davis if any holders of the one page permits had sued in court to avoid meeting the closure regime. Mr. Davis said yes.

Mr. Burrier continued that the existing phasing plans for the post-1993 facilities in association with financial assurance requirements don't require these details; therefore, the logical solution is to require the 1205 landfills to do something similar. Mr. Wickline asked if the leachate collection systems are separate on the units Mr. Burrier drew on the board. Mr. Burrier said yes, it is an economy of scale; there are divider berms under ground separating the leachate systems by cell. He explained that to do the whole area under a single leachate system wouldn't be possible because of the pumping equipment required. Mr. Dietrich said in the early 1990s it was the tendency to attempt do it all with one leachate system, but it was found to be inefficient. Mr. Bingham said it was easier to control stormwater diversion by separating the cells. Mr. Burrier said the liners are joined between cells, but they have different grades and this separates the leachate collection cells. Mr. Burrier said piggy-backing is nothing new. Mr. Davis provided more examples of problem sites. Mr. Burrier said financial assurance requirements favor progressive closure. Mr. Davis said that it depends upon your mode of financial assurance.

Mr. Graham asked if DEQ had done an analysis of requirements to enforce one page permits vs. the more complete permits? Mr. Davis replied that without consistent standards across the board, the current regulations structure is inefficient for compliance purposes. Mr. Dietrich said many one page permits are resulting in compliance issues. Mr. Graham noted that it hurts the reputation of all the others. Mr. Dietrich said Mr. Graham was probably right there. Mr. Wickline was concerned that closure described by Mr. Burrier is closure on the fly. Mr. Bingham, Mr. Sedgley, and Mr. Burrier all chimed in that it is not on the fly; it is a well laid out and identified procedure in the plan that they have to follow. Mr. Davis explained that a modern landfill has one big unit divided into phases, divided into cells. Mr. Burrier and Mr. Bingham agreed. Mr. Wickline asked how does DEQ define the landfill; is it defined as one contiguous footprint over a liner? Mr. Burrier said it is all laid out in the Part B application. It is designed throughout and is well planned. Mr. Dietrich agreed. Mr. Davis indicated older sites are not planned out like newer sites are.

Mr. Wickline said we have a concern over the definition “facility.” We should be regulating different items (incinerator and landfill) side by side as different facilities. Mr. Burrier asked if this issue came out of postclosure issues. Mr. Wickline said yes in part. Mr. Burrier cautioned there is a distinct line between closure and postclosure. It’s not postclosure until I’ve quit modifying the permit. If they have just closed an area but haven’t gone into postclosure, it should remain possible to use the area, but only when a modification is submitted. Mr. Burrier said that maybe we should call closed “capped” because we still do all the monitoring, etc. Mr. Wickline asked why we are withdrawing financial assurance then? Mr. Bingham and Mr. Burrier said that when they modify for reopening they have to come in with new financial assurance. Mr. Dietrich said we need to clarify the definitions for facility, cell, area, and unit in the regulations. Mr. Wickline agreed. Mr. Wickline said the closure procedure is not under permit amendment the way the regulations are now. Mr. Dietrich said the first thing shown in a modification of closure is what units are affected. Mr. Davis said what Mr. Burrier is describing is all well and good, but we don’t have it at all the sites. Mr. Dietrich agreed that we have to make such uniformity of requirements happen. Mr. Burrier asked if there is anything in 1205 and the Code that would prohibit DEQ from making the one page permits abide by the closure scheme we’re interested in. Mr. Wickline said it is not exactly clear all the time what 1205 is. Mr. Burrier said the downside of modification is the cost associated with it, \$4000 per sheet for up to 15 sheets for a closure plan. Mr. Sedgley asked if the change to the regulations will involve only adding wording to get the one page permits up to modern closure standards. Mr. Davis said the ideal would be to upgrade the regulations to clarify the unit/area/cell concept that Mr. Burrier drew on the chart. Mr. Dietrich suggested that Mr. Wickline look at other DEQ regulations that define facility etc. to make sure it is consistent. Mr. Dietrich noted that the conversation sounded like the committee was in agreement on what needs to be done, just not the wording.

Groundwater issues

Mr. Dietrich introduced Howard Freeland (RCRA groundwater manager for DEQ) to address the background groundwater data issue. Mr. Freeland explained that groundwater background is important to a sanitary landfill, to establish a statistical background. You need at least 4 or many more sampling events for data comparisons for a good statistical background. When you have only a month separation between samples, the samples are not very independent. It just moves the background process earlier in the process, it doesn’t cost more money. This new requirement allows the applicant more time to develop data. Mr. Martin asked do you want this to hold up submission of the Part B. Mr. Freeland said that there is a time gap between identifying a new site and opening a new unit. He saw this as a year. Mr. Burrier replied that it could be shorter. He said that historically a facility is required to provide 4 independent quarters (permit requirement not regulatory), so you are just extending the time period. Mr. Burrier said unless there is an organic problem beforehand, the additional data is useless, because the statistical difference just gets smaller between data points. He agreed the background is useful for ASDs but otherwise is of limited value. Mr. Cheliras’s concern was that we do this prior to the Part B process, before the Part A is approved. Mr. Cheliras agreed with Mr. Freeland, that it is part of the Part B process rather than part of the Part A. Mr. Burrier said historically you put the wells in at the draft Part B stage and a compromise would be 4 independent samples prior to taking

waste. He felt it is up to DEQ's discretion as to what time frame is required for 4 independent samples. Mr. Martin asked if this isn't the way it is now. Mr. Freeland said it is the way in the permit but it is not written that way in the regulations. Mr. Burrier said this is the practice. Mr. Freeland agreed with Mr. Martin that DEQ can substitute the 4 independent samples prior to taking waste for the NOIRA suggested language.

HB 2192, siting next to wetlands and water supplies.

Mr. Freeland said he worked on the public water supplies vs. Paul Farrell who worked on the wetlands. Mr. Wickline said the plan was to merge elements of the guidance into the regulations. Mr. Burrier said both guidance docs have discrepancies and conflicts and his firm is looking to see how they are applied before commenting on them. Mr. Burrier said there are discrepancies between the guidance and the Code. Mr. Freeland pointed out one discrepancy, State Health Department and DEQ agreed that DEQ would do time of travel calculations, but none of that was in the Code. Mr. Burrier said Code says upgradient, but Health Department defines it another way. The guidance refers to two gradients, one related to the potentiometric surface and the other relates from the bottom of the well to the bottom of the landfill. Burrier said a landfill that is 10 feet deep and that a well a mile away is deeper, but the potentiometric surface is in the opposite direction, so the deep well won't be impacted by the landfill. Mr. Freeland replied that the language was there because we were looking at cones of depression. Mr. Burrier said that as long as the final regulations clarify upgradient/downgradient as the potentiometric surface, then it's okay. Mr. Wickline said we will just include the statutory language in the regulations (not the guidance language in the regulations). Mr. Freeland would like to refine the time of travel requirement in the regulations. Mr. Burrier cautioned that we don't get into hypothetical cases when evaluating gradient. Mr. Burrier wants to be sure that we base our analysis on how we measure our water levels in wells/ potentiometric surface, not based on models. Mr. Burrier wanted to make sure this is recorded in the record. The TAC agreed that they were not opposed to putting the code language in the regulation.

Mr. Burrier then went on to comment on the wetlands issue that he is concerned with, how to evaluate the term "impact." This has been expanded to wetland replacement on-site to include off-site impacts in the guidance document. The off-site impacts are out of the context of the Code section. Mr. Brockman explained that Cathy Harold of Water Quality Division was involved in the guidance document for wetlands along with Mr. Farrell and Mr. Dieter. Mr. Burrier agreed to help DEQ on the guidance document by giving specific comments. Mr. Burrier stressed that the intent of the Code change was wetlands in the footprint, not off-site.

Public Involvement

Mr. Brockman reported that it was public meetings the owner/operator is required to hold by the regulations for which notice is sought, not other local government meetings. Previously, the owner/operator submits a record of the meeting with the permit application; however, the group wished to know of these meetings before they happen; therefore, they had made the request for website posting. Intent of this NOIRA issue is to put meeting information on the web. Mr. Burrier stated that this is usually submitted as part of the record. Mr. Martin said you have to give public notice anyhow, but he wondered does DEQ want to impose another requirement

here. Mr. Martin suggested that we add in section 5A that they give a notice to DEQ for the website. Consensus was thereby reached on the issue.

Screening and Grit

Mr. Sedgley said someone at DEQ concluded that screenings/grit and sludge are different. Mr. Sedgley explained that screenings (including rags) and grit (heavier material) are typically landfilled together. Mr. Sedgley said that the old DEQ/State Health Department regulations made a distinction between screenings and grit, but now that definition has gone away. Mr. Farrell is exploring some guidance about liming small grit disposal areas before landfilling. Mr. Burrier asked if the Health Department defines screening and grit as “sludge.” Mr. Burrier said by industry standard. (grits and screenings) were separate from sludge. Mr. Burrier suggested that we could decide it by health standards (placement of grits plus screening waste at the face vs. sludge in the landfill). Mr. Burrier asked if it is possible to add something to the acceptable waste list on this issue. Mr. Sedgley said yes or that it might be satisfied by Paul Farrell’s guidance. Mr. Sedgley (Aqualaw) said the guidance is ok for now. Mr. Cheliras (SPSA) said that we need to keep the distinction between such screening and grit vs. stormwater grease plus grit (which could have household hazardous waste in it). Mr. Wickline asked what they do with grease plus grit if it is not hazardous waste. Mr. Cheliras said it can be landfilled if not hazardous waste. If hazardous waste is eliminated, screening plus grit is equivalent to grease plus grit for landfilling purposes.

“Vertical design capacity”

Mr. Davis explained that the issue is that recent language allowed 1205 facilities to work up to their vertical design capacity. We are seeing this being taken to the extreme. We are trying to make sure that they aren’t going beyond the intent of 1205 and the vertical design is consistent with past operations. This may not seem like a big issue, but it results in unlined landfills disposing of more waste than intended by expanding vertically in a way inconsistent with past operations of the unlined unit. The effective is prolonging the life of unlined landfills and results in a delay in development of new lined facilities. Mr. Dietrich asked what wording Mr. Davis is looking for. The definition will specify that closure elevation in the plan can also define vertical design capacity of the facility. Mr. Davis said in the permit or closure plan or max 3 to 1. Mr. Burrier asked what is the new schedule for ultimate closure. Mr. Davis talked about high priority to low priority outlined in the HB1205 closure prioritization schedule. Mr. Wickline saw the problem of 3:1 as a maximum slope doesn’t anticipate terraces. Mr. Burrier agreed, but said that the overall maximum rate is 3:1. He said terraces would be built 2:1 out of dirt with a localized steeper slope than 3:1. Mr. Wickline asked if this was a good idea. Mr. Burrier said it’s stable. Mr. Wickline was concerned about these terraces in a final cap and that they are localized steeper than the final cap. Mr. Wickline said erosion concerns are more important to DEQ. Mr. Dietrich drew a picture of 2:1 sharkfins terraces projecting out of an overall slope of 3:1. Mr. Wickline was concerned about sloughing possibilities in the steep slopes. Mr. Wickline asked why DEQ is allowing this. Mr. Sedgley said it is an engineered structure. Mr. Bingham pointed out that the terraces channel surface flow for less erosion than would occur without. Mr. Burrier said it was more structurally sound if designed accordingly. Mr. Burrier said they compact the terraces in a linear plane rather than in a vertical plane. Mr. Wickline said it was not

sound compaction for the terrace edges. Mr. Davis pointed to section 60 B for the required closure date with maximum design elevation or 3:1. Many of those that were at 4:1 on closed areas but continue to fill on open areas to get to 3:1 and that this is not consistent with the intent. The problem is this provision was meant to transition to lined site, not maximize the amount of waste landfilled on unlined areas which is environmentally unsound. Mr. Burrier said the time left (some have been around for 13 years without groundwater, gas, monitoring, etc.) leaves plenty of time for the 1205 to prepare for a new permit like anyone else. Mr. Davis said we are seeing some sites trying to move beyond the specified closure date and extend their operations on unlined areas.

“Disclosure Statement”

Mr. Davis said it should be made a regulations requirement rather than be included in the regulations as a definition; it is so long and direct from the Code. Mr. Burrier mentioned that DEQ has quit requiring Social Security Numbers. Mr. Burrier suggested striking it from the regulations, Item 1 under the definition. Mr. Wickline said that if the statute requires Social Security Numbers, it may be a problem to change the regulations. Mr. Davis asked the requirements be moved into the regulation and expanded as necessary to make sense and an effective tool.

“Household hazardous waste”

Household hazardous wastes at permitted solid waste facilities is only addressed in the transfer station section. Mr. Davis said it should be made uniform for household hazardous wastes throughout the regulations. Mr. Sedgley asked what was addressed in transfer stations but not landfills. Mr. Davis explained the differences, referring to section 340.C.6. versus the Code. Mr. Bingham asked if DEQ wants a containment system at landfills as well. Mr. Davis said yes. Mr. Dietrich and Mr. Bingham speculated that a transfer station receives more household hazardous wastes and the loads can be inspected more easily than at landfills. Mr. Burrier agreed that a uniform standard was a good idea. Mr. Sedgley said we should be cautious on how this would affect smaller facilities; some of them accumulate household hazardous wastes for a long period of time. Mr. Dietrich pointed out that some such collection centers are not at landfills but at civic centers. Mr. Burrier pointed out the problem with the 10 day issue for small facilities. Mr. Burrier said household waste is exempt from hazardous waste regulations and this doesn't change from pickup to disposal. Mr. Sedgley said it doesn't change after collection. Mr. Wickline said even if it isn't recognized as hazardous waste, it is hazardous waste still; it is just exempt from the regulations. Mr. Martin said this raises semantic problems. Mr. Martin asked Mr. Davis what motivated the proposed change. Mr. Davis said some sites want to collect household hazardous waste and the standards should be consistent regardless of the type of waste management site. If containment systems or pads are appropriate at transfer stations, then they would be appropriate at other sites. Mr. Davis said the legislation doesn't apply just to transfer stations, it also applies to the landfills. It was just written that way in the regulations section. The regulations should be clarified to help the facilities do the right thing. Mr. Martin advised not to discourage such household hazardous wastes collection, because it is a good thing.

Onsite certified operator in the law

Mr. Davis says the requirement for a licensed operator is in the Code. Mr. Burrier said the practice has been swing crews and standbys. Mr. Davis said this has been a problem. Mr. Burrier again asked if the Code says on-site and on the premises. Mr. Davis said “absolutely,” on-site and certified. Mr. Burrier pointed to issues of problems with logistics; it isn’t practical. Mr. Martin asked if “on-site” means based there, lodged there, or place of employment. Mr. Martin said you can have an on-site presence and still be in the TAC meeting. Mr. Wickline asked why they don’t have other employees certified. Mr. Bingham said the certification process is complicated. Mr. Burrier said it is a weeks worth of training. Mr. Burrier said multiple licenses are expensive. Mr. Wickline said that large facilities should be able to afford it. Mr. Burrier wants to be sure the way DEQ writes regulations is practical. Mr. Wickline compared it to the need for driver’s licenses. Mr. Bingham said the analogy is not the same; it is easier to get a driver’s license than the certified operator landfill license. Mr. Burrier said it’s not like the staff are untrained, they just aren’t all certified. Mr. Dietrich agreed that the employees are capable, they just aren’t certified. Mr. Wickline agreed that not everyone there at the landfill needs to be certified, but there should be at least one onsite when the landfill is open. Mr. Cheliras (SPSA) raised the analogy that the DEQ director is in charge, but he is not always on site; this is the same situation for the certified operator. Mr. Sedgley didn’t agree that there has to be a certified operator always on site.

Mr. Davis pointed to the difficulty that occurs when the person left in charge wasn’t the certified operator and responsible for site operations. He said that when was asked to answer inspector’s questions; some sites referred the inspector to the certified operator who resides offsite. Also, who controls the landfill when the operator is absent or unable to return to work? We just want to make sure that a certified operator has appropriate authority and is in control when the site is operating. Mr. Davis said he just wanted to bring it forward from the Code. Mr. Burrier asked that if DEQ spells it out in the regulations, make it practical. Mr. Burrier said it costs \$2000 a person to get operators certified. Mr. Bingham said the class is held at John Tyler Community College in Chesterfield, a long way for the guy in Scott County. Mr. Bingham suggested that the DEQ should put on spotter training classes of 1 or 2 days around the State. Mr. Bingham said maybe DEQ needs to create a lower rung in the certification for people qualified but are not the manager/operator, with an easier test (less engineering design qualifications, but could cover leachate, cover regulations, etc.). Mr. Wickline agreed that they have wastewater training courses, but DEQ has never done this for waste operators. Mr. Davis advised that the Department of Professional and Occupational Regulation is the agency that establishes testing and certification requirements, not DEQ.

Mr. Dietrich asked if anyone else had further issues. Mr. Graham asked about the minutes and Mr. Wickline explained that they needed to be posted in 10 days, so the TAC would get the minutes soon after the meeting to review and return comments in 3 days. Mr. Burrier said it would be productive if they could see the draft regulations before they go to the Board.