

May 13, 2016 Issues of Contention

The following is my list of primary issues of concern in regard to the proposed expansion of the State-owned Juniper Ridge Landfill (JRL) in Old Town. Please bear in mind that this is my subjective list and that likely many issues of concern to other intervenors and the Public may not be included. However, silence does not equal consent. This is not a court of law. The purpose of holding a formal, well-advertised Public Hearing is to solicit concerns from all citizens about an expanded landfill. There are many engineers, biologists, and other scientists in our local community with a much more detailed understanding of our ecological system and how it is affected by concentrating a massive pile of discards in the lower Penobscot Valley.

The standard disclaimer in DEP permits says “This project will not harm the health, environment, or welfare.” In my opinion there are many aspects of an expanded JRL that pose threats to all three. Citizens need to know that we and our ecosystem are being protected in the present and a century from now. It is up to the applicant to prove that there will be no negative effects on society, but often it seems like the equation is flipped and opponents must present overwhelming evidence of a technical nature. Unlike at a Hearing for a new landfill, we have twelve years of history at JRL that illustrate problems that will likely occur should the lifetime be extended.

State lack of planning

The State admitted at a Juniper Ridge Landfill Advisory Committee meeting last fall that they have done nothing to find an alternative landfill site. This means that JRL is the only choice for landfill capacity at present. The Board must decide whether or not to approve an expansion, and the State, as owner of JRL and any future landfills in Maine, has no other plan. This means that at present, Old Town is a Sacrifice Zone because the State has failed to plan responsibly.

State lack of control

In the Operating Services Agreement (OSA) between the State and Casella, it says “The State shall control the landfill.” This has not been the case. The State, as owner (formerly the State Planning Office, now the Bureau of General Services) has never to my knowledge denied Casella’s desires in a single instance, even when it involved violating the State Waste Hierarchy and allowing curbside garbage into JRL unsorted. Probably the most stunning example came in November 2006 when the SPO and Casella signed the Second Amendment to the OSA. The new Fuel Supply Agreement allowed Casella to import Construction and Demolition Debris (CDD) from non-Maine sources and deposit the residues from processing CDD fuel for any boiler in Maine into JRL. The original agreement allowed only imports of fuel for the Old Town Mill’s Biomass Boiler. This was an expansion of the waste stream without notice. The Leachate Disposal Agreement from the Second Amendment also mandates that whichever entity owns the Old Town Mill’s Wastewater Treatment Plant to dispose of JRL leachate at no cost to Casella. Citizens had to discover the existence of the Second Amendments because the SPO and Casella never told the DEP, Old Town, the JRL Advisory Committee or the Public that they had taken place. From November 2006 until 2008 the DEP, JRL’s regulator, never knew that the waste stream had been expanded or the Mill was required to dispose of JRL leachate. There was no fine or regulatory action. Casella controlled the landfill- how will an Expansion be any different? Please demonstrate how DEP and BGS will control an expanded JRL.

Technical Issues

All Landfills Leak

I will present documented sworn testimony that all landfills leak. The applicant must prove that this landfill will not leak toxics into the surrounding surface and subsurface waters and soils.

Crushed Gas Lines

At one of the Milestone Meetings, December 18, 2014, there was a presentation by Eric Stinehouse of Sanborn Head. They work on landfill gas collection systems at JRL. He said that at some point, "The lower pipes may collapse." How can this system function effectively if part of it is disabled? The gases contained in JRL pose a threat to the surrounding living beings. In addition, landfills are the largest single man-made source of methane released into the atmosphere. Methane is a powerful greenhouse gas, dozens of times more damaging to our climate than carbon dioxide.

Unidentified sources of pollution

At a Juniper Ridge Landfill Advisory Committee Meeting on Indian Island in late 2013 Casella was asked to explain their rebuilding of Sedimentation Pond #5. This cost over a million dollars when the existing pond was found to be in exceedance of toxicity. Mr. Sevee and Mr. Booth of Sevee and Mahar Engineering (SME) could not explain or identify the source of pollution. They tried to say it was because of activities at the landfill when it was owned and operated by the Old Town Paper Mill. SME were also in charge of environmental engineering at that time.

Lack of technical oversight

In another incident suggestive of poor design and control by Sevee and Maher and DEP, the paper mill landfill had a landslide where one side of a cell slid into a sediment collection pond. How can the Public be certain that events like this will not happen again, with the same designers involved?

Inadequate storm construction

At a Milestone Meeting Mr. Booth said that the landfill expansion would be designed to withstand a 25 year rainfall event, and they use Orono records which show a limit of 4.8 inches of rain in a 24 hour period. We know that regionally, nationwide and worldwide extreme precipitation events are becoming more common over time. Within the last decade, flooding events from Brownville to Patten, Maine occurred as a result of an approximately eight inch rainfall in only a few hours. We have friends in Madison, VA and relatives in Lyons, Colorado who experienced cataclysmic floods from approximately 20 inches of rainfall in a 24 hour period. Here at JRL, in the early years of operation there was a flood that resulted in major sediment transfer beyond JRL's borders and destruction of stormwater control infrastructure. How can we be certain that we are protected from extreme weather events given the history and low standards of construction?

Threat of subsidence

During the glacial periods over 10,000 years ago, the weight of mile-thick ice depressed the earth's crust underneath the weight. In places, the surface of Maine is still rebounding from that period. At JRL, the amount of wastes deposited to date are roughly equivalent to the weight of a mile of ice piled over a one-acre area. In addition, unlike ice, the weight of debris is constantly being compacted by huge

machinery, further stressing the underlying geology. Now the proposal is to almost triple the current size of the landfill. A fully expanded JRL would be three times the size of the Hampden landfill. The applicant should present evidence that subsidence will not occur, and have experts available at the hearing to address this issue.

Leachate not treated.

Due to biological and chemical breakdown within JRL as well as rainfall on active parts of the pile, liquid falls to the bottom and this leachate is collected and trucked to a Wastewater Treatment facility. For the most part this has been at the Old Town Mill's plant. As of last fall, the paper mill has not been operating and its future is doubtful. Despite this, the JRL leachate is still being dumped into that system and without chemical treatment periodically released into the Penobscot River (the term is "batch releases"). Small amounts of other wastes also go into that facility, but basically they are sending toxic leachate directly into the River. It is unclear from DEP how much dilution takes place before the release, but there appears to be no effort to neutralize the PH. What about the materials that build up in the bottom of the settling tank in Old Town? Are they disposed of at JRL? Are they tested for toxicity/hazardous materials such as lead? In the early days of DEP analysis of this proposal, staff commented that the leachate would go to Brewer, which is a very large system better-suited for leachate disposal. Casella gets to save money by avoiding Brewer, and the Public's environmental quality is diminished. This is but one way that JRL negatively impacts the Welfare of our community. Proposed Federally Promulgated Water Quality Standard rules 131.43 would require a "mixing zone" and that effluents into the Penobscot River not interfere with the migration of wildlife.

Inadequate compensation for wetlands destruction. (NRPA and US Army Corps of Engineers)

As part of the expansion project some valuable wetlands will be destroyed. To compensate for this destruction, the Natural Resource Protection Act (NRPA) and United States Army Corps of Engineers require compensation either in the form of forever-wild protection of valuable wetlands or a cash equivalent determined by Army Corps rules. The current plan is to set aside 266 acres north of JRL. The State owns the land. This property would never be developed unless it is turned into a future expanded JRL. The land is in Old Town, and the private road it borders is on the Old Town/Alton town line. Old Town's building codes require any house lots to be connected to a well-engineered modern road, which the Stagecoach Road is not. This is why the only homes along the road are located in Alton. Visitors to the set-aside land would have to access it through the dump or along the Stagecoach Road, which will not be popular with the residents. Old Town appears reluctant to serve as the 3rd party overseer in charge of the proposed property, and other organizations may be reluctant to manage the property (such as the Hirundo Wildlife Refuge or other conservation entities). Casella and the State would be giving up very little in compensation, and in the future Old Town could be pressured to allow landfill expansion. It cannot be a "pristine independent ecological unit" because it is very loud and frequently affected by hydrogen sulfide gas and other landfill emissions. In addition, preserving land and vernal pools elsewhere on the site is not the ecological equivalent of maintaining the wetlands in their original state.

Threats to wildlife habitat

An expanded JRL may seriously impact several species. The northern long-eared bat is currently listed as a threatened species by the US Fish and Wildlife. A brief survey of the expansion area was done by Stantec but no bats were found. Do bats roost that close to an existing landfill? How close are observed NLEBs to the site? There are also 3 significant inland waterfowl/wading bird habitats identified on the state-owned 780 acre site.

The primary threat of an expansion to JRL is to Atlantic salmon, a federally protected endangered species. Much of the JRL site is in NOAA mapped Atlantic Salmon Mapped Critical Habitat! Stantec asserts "...nor is the expansion expected to result in impacts to mapped or delineated streams...", but since an expanded JRL would be over 100 acres of impervious artificial hill larger and steeper than any natural geographical features in this area, and they are only building for a 25-year precipitation event, there is certainly going to be negative impacts on the small local streams which are tributaries to the Penobscot River system. There should be ample time allotted at the Hearing for experts in wildlife/fisheries to answer questions.

Waste streams into JRL

Lack of Honest Accounting. The State has failed to honestly, accurately and independently account for the amounts, true sources, and types of wastes entering JRL since 2004. Chapter 400 Rules, specifically Section 3(d)(2)(b) mandate reduction at the source or point of discard, which does not happen for a large portion of the waste stream because it originates outside of Maine's borders. Since all statistics related to JRL wastes are collected and verified only by Casella employees, we are unable to ascertain just how much of the past, present and future waste piled in Old Town were discarded within Maine's borders. I hope to clarify trends in types and categorizations of wastes into JRL in regard to fees paid to Old Town, Alton, and the State despite lack of third-party verification of JRL activities. What other private partners of Publicly owned facilities have nobody looking after the Public's financial interests?

Alternatives analysis

Central to the NRPA and United States Army Corps of Engineers application is an Alternatives Analysis. Casella/BGS has made no effort to offer true alternatives to the current status quo despite many events pointing to lower waste volumes in the future. In April 2018, contracts for disposal of municipal solid waste (MSW) currently going to the PERC incinerator in Orrington expire. From that point forward, PERC plans to stop accepting out of state waste and will burn one-third less material. This means that the byproducts of their waste to energy (WTE) coming to JRL, which are ash and Front End Processed Residue (FEPR) will diminish accordingly. The Municipal Review Committee (MRC) has an alternative plan to build a waste-processing facility in Hampden with Fibrigh. Residues from the new plant would go to the Crossroads Landfill in Norridgewock, not JRL. The MRC, a co-owner of PERC, says that PERC will have to go out of business. This could result in much less waste into JRL.

Currently Maine is following the lead of other New England States and working to remove organic materials from our waste streams. Organics make up about 40% of MSW by weight. Private entities like Garbage to Garden and Exeter Agri-Energy are making strides to acquire any organic materials they can and thus diverting them from landfills and WTEs. Casella is even working with PERC and Exeter to achieve this, but their Analysis shows no scenario for what this might do to waste volumes at JRL.

What could have the largest effect on waste reductions into JRL is the status of ReEnergy's CDD processing facility in Lewiston. Since acquiring this facility from Casella (KTI up until then) a few years ago, they have told the Maine Legislature that they could be closing due to the fact that there is almost no market for their CDD-derived fuel. The waste stream into the former KTI consists of approximately 85% debris from out of state (OOS), after "processing" over 90% comes to JRL where much of it is classified as "fines for daily cover" and a "recycled material". There are other wastes coming to JRL that could serve as Daily Cover, such as ash from PERC or CDD from Maine or soils left over from landfill cell construction. Where is the Alternatives Analysis for JRL after a closed ReEnergy in Lewiston?

In a letter from DEP's Michael Parker to Mr. Barden and Mr. Meagher dated January 22, 2016, beginning on the third page and continuing onto the fourth is a section of staff notes titled "Chapter 400.4N, Solid Waste Management Hierarchy". Based on their analysis of 2014 reports, seven categories of wastes accounted for 88.7% of the 2014 wastes received at JRL. DEP staff says "Of these seven categories, FEPR and MSW ash currently have no other viable management option." Two of the categories, comprising 28.3 % of proposed expansion materials, fines from CDD processing and bulky waste from CDD process are "arguably generated from the processing of out-state wastes." In addition, almost half of the Biosolids accepted at Casella's Hawk Ridge facility is from out of state sources. They take in more than they can process, and send the rest to JRL. This category of material is proposed to grow to 10% of the JRL input.

What should the State do if faced with a shortage of landfill space at JRL due to rejection of the proposed Expansion? Return to the rules in place in 2003 when JRL came to be state-owned. This would eliminate most of the CDD residues from processing facilities. Redefine "recycled material" to state that anything deposited into a landfill will not be labeled "recycled". Restrict out of state import by strictly enforcing Chapter 400 rules on Source Reduction. The Maine definition of out of state waste was expanded in 2007, after the OSA had been changed to allow more CDD residues into JRL- change the law to a common sense definition of what is in-state waste. Mandate Deconstruction so that more CDD materials could be safely burned in WTE plants and other boilers. Tighten Maine rules so that they align with those in other states like Connecticut and Massachusetts to remove pressure on Maine landfills. Most importantly, pursue Waste Zero policies with vigor and resources.

Public benefit determination-unmet obligations by Casella/BGS

Page 25 of PBD: "The Commissioner further finds that, consistent with the goals of the State Plan and the statutory solid waste management hierarchy, the applicant should aggressively pursue in the course of its operation of the existing JRL and the proposed expansion approaches that decrease the volumes of waste requiring disposal, and that the applicant does not adequately demonstrate that the proposed expansion advances the State's waste reduction, reuse and recycling goals."

Page 29, Conclusion #6: "The Commissioner recommends SPO and Casella amend the OSA to address the significant quantity of CDD imported into Maine under the terms of the OSA, and the associated large volumes of processing residues delivered to the JRL."

To my knowledge, Commissioner Aho's recommendations have been ignored by Casella/BGS (BGS replaced SPO as State owner). This may be a violation of the PBD and should be addressed prior to any expansion permit. See "State Lack of Control" (above).

Threats to the public welfare

There seems to be no definition of the term “welfare” or “public welfare” in the application or associated criteria. There are statements that landfill-related activities will not harm the welfare, but there is no discussion or evaluation of an expanded JRL’s impact on the public welfare. Under the Clean Air Act, “Primary standards are those ‘requisite to protect the public health’, while secondary standards are those ‘requisite to protect the public welfare’, which is defined as including, but not limited to, ‘effects on soils, water, crops, vegetation, manmade materials, animals, wildlife, weather, visibility, and climate, damage to and deterioration of property, and hazards to transportation, as well as effects on economic values and on personal comfort and well-being.’”

In their application, Casella/BGS does mention JRL’s effect on many of these, but how each element and the overall expansion effect the Public Welfare as a whole is left out. From the perspective of a Maine citizen, “welfare” is not adequately addressed, and is therefore incomplete and needs serious attention. Our public welfare was certainly negatively affected by the creation of JRL and will only be enhanced and prolonged by an expanded JRL.

Property devaluation

It is well documented that landfills negatively affect property values. Although the proposal is for a landfill expansion, not a newly constructed landfill, the proposal will nearly triple the footprint of the existing landfill and bring it closer to previously unaffected homes. Even after a landfill is closed and capped, it can still affect property values within at least a one-mile radius, and even further, depending upon the characteristics of the landfill. For example, property values in the entire area may be affected, as the property values within a town are partially determined by the reputation of the area in which they are located. Risk perception – regardless of whether or not a documented risk exists – may translate into economic risks. No study has been done on the impact of the Juniper Ridge Landfill on property values in the host communities; however, some states are requiring such as study to be conducted. Pennsylvania’s Department of Environmental Protection, for example, is required to consider property value impacts when making landfill permitting decisions.

Stigma effect and effect on economic development

Locally undesirable land uses (“LULUs”) have been demonstrated to create a “stigma” effect, which not only affects residential property values, but commercial and industrial property values as well. For example, studies have shown that an area’s environmental amenities are a key factor in the location of firms, especially if quality of life is deemed to be important to their workers. The community of Old Town has adopted, in its Draft 2016 Comprehensive plan, strategies to “enhance livability and ecotourism opportunities... and instill pride in the community” (page 13). Expanding the landfill seems to be at odds with this strategy. We would like the implications of the proposed expansion on economic development to be addressed.

Likewise, tourism and other economic activity could be negatively impacted. The JRL is already clearly visible from Routes 43 and 16, and after the expansion it will be more widely visible. According to the expansion application, the proposed increase in the expansion’s height will be higher than the highest point in Old Town. Even though a consultant then stated that the proposed height elevation will not “unreasonably adversely affect the use of the resident’s property or other existing uses in the area,” the

definition of “unreasonably” is open to debate (page 46). We would like the implications of the proposed expansion on economic development to be addressed, and the meaning of the term “unreasonable” to be explored.

Odor, noise, truck traffic, and enjoyment of property

Other negative effects of landfill expansion include increased truck traffic, noise, and odor. Truck traffic from the expansion (after construction) is expected to nearly double during peak hours, according to the application for expansion (page 3-6). During construction (estimated to be 9 months, but potentially much longer), however, noise and traffic is likely to increase substantially. Noise (backing up of vehicles, etc.) is also likely to increase. Even low-level exposure to noise, occurring over a long time, is associated with hypertension, sleep disturbance, and productivity. Several communities nationwide have accepted noise ordinances deeming noise to be excessive if it is annoying, unsafe, or disturbing to the peace.

There have been, on average, two to three odor related complaints per month to JPL in recent years. While about half of these are determined to be non-landfill related (according to staff at the landfill), the consistency of the reports imply that the operators of the landfill have not successfully mitigated odors, affecting the welfare of nearby residents.

Finally, there is a growing literature on the “psychosocial” effects of living in close proximity to a solid waste landfill (chronic stress and the health effects associated with it, as well as divisions within the host communities themselves). We would like the operators of JPL to demonstrate that there will be no increased noise, odor, or other detrimental effects of the expansion on the already diminished welfare of those in proximity to the landfill.

Environmental justice and distribution of costs and benefits

Environmental justice requires an equitable distribution of the costs and benefits of an environmental policy. In this case, however, the benefits of hosting a landfill, such as they are, go to the operators of the landfill and to the host community in the guise of impact fees. The costs of landfill expansion are concentrated on the nearby residents, but are also imposed upon the natural environment and on future generations, who do not have a voice at the table. We would like to ensure that the distribution of costs is considered. Lack of ability for meaningful community representation in the process, beginning at the earliest possible time, has resulted in lack of protection from environmental, health, and welfare hazards for local communities.