

ALBERTA ENVIRONMENTAL APPEALS BOARD

Report and Recommendations

Date of Hearing – December 12 and 13, 2007

Date of Report and Recommendations – January 14, 2008

IN THE MATTER OF sections 91, 92, 94 and 95 of the *Environmental Protection and Enhancement Act*, R.S.A. 2000, c. E-12, and section 115 of the *Water Act*, R.S.A. 2000, c. W-3;

-and-

IN THE MATTER OF appeals filed by Paula McGinnis, Laura Peaire, Mike Agostini, Brenda Reddekopp, Jean Morrison, Jana Siminiuk, and Gordon Phillips with respect to *Water Act* Approval No. 00204375-00-00, *Environmental Protection and Enhancement Act* Approval No. 203803-00-00, *Water Act* Licence No. 00203992-00-00 issued to Burnco Rock Products Ltd., and *Water Act* Amending Approval No. 00022289-00-01 and *Water Act* Amending Approval No. 00022289-00-02 issued to Parkland County by the Director, Central Region, Regional Services, Alberta Environment.

Cite as: *McGinnis et al. v. Director, Central Region, Regional Services, Alberta Environment, re: Burnco Rock Products Ltd. and Parkland County* (14 January 2008), Appeal Nos. 06-014-030, 032-034, 042-049-R (A.E.A.B.).

BEFORE:

Dr. M. Anne Naeth, Panel Chair,
Dr. Alan Kennedy, Board Member, and
Mr. Eric McAvity, Q.C., Board Member.

BOARD STAFF:

Mr. Gilbert Van Nes, General Counsel and Settlement
Officer; Ms. Valerie Myrmo, Registrar of Appeals; Ms.
Denise Black, Board Secretary; and Ms. Marian Fluker,
Associate Counsel.

PARTIES:

Appellants: Ms. Paula McGinnis, Ms. Laura Peaire, Mr. Mike
Agostini, Ms. Brenda Reddekopp, Ms. Jean Morrison,
Ms. Jana Siminiuk, and Mr. Gordon Phillips.

Director: Mr. Tom Slater, Director, Central Region, Regional
Services, Alberta Environment, represented by Mr. Bill
McDonald, Alberta Justice.

Approval Holders: Burnco Rock Products Ltd., represented by Mr. J. David
Brett, Gowling Lafleur Henderson LLP; and Parkland
County, represented by Mr. Brian Rimmer.

Intervenors (via written submissions): Mr. Lee and Ms. Marlene Marczak, and Mr. Gary
Butterfield; and Mr. Rick Green and Ms. Jennifer Morin.

WITNESSES:

Appellants: Ms. Laurie Peaire; Ms. Paula McGinnis; and Ms. Jana
Siminiuk.

Director: Mr. Tom Slater, Director, Central Region, Regional
Services, Alberta Environment; Mr. Ryan Puhlmann,
Reclamation Approvals Coordinator, Alberta
Environment; Mr. Kevin Nipp, Hydrogeologist, Alberta
Environment; Mr. Rod Lumabi, Water Administration
Officer, Alberta Environment; and Mr. Guy Hancock,
Water Technologist, Groundwater Approvals, Alberta
Environment.

Approval Holders: Mr. Brian Rimmer, Supervisor, Environmental Services,
Parkland County; Mr. Gerry Samide, Sameng Inc.; Mr.
Scott Burns, President and Owner of Burnco Rock
Products Ltd.; Mr. Kim Titus, Vice President, Aggregate
Division, Burnco Rock Products Inc.; Mr. Douglas
Leahey, DML Leahey & Associates Limited; Mr. Roger
Clissold, Hydrogeological Consultants Ltd.; Mr. James
Touw, Hydrogeological Consultants Ltd.; Dr. William
Murray, Promet Environmental Group Ltd.; Dr. Robert
Rogers, Toxcon Health Sciences Research Centre Inc.;
and Mr. Jack Davis, Patching Associates Acoustical
Engineering Ltd.

EXECUTIVE SUMMARY

Alberta Environment issued *Water Act* Approval No. 00204375-00-00, *Environmental Protection and Enhancement Act* Approval No. 203803-00-00, and *Water Act* Licence No. 00203992-00-00 to Burnco Rock Products Ltd. for the operation of a gravel pit near Duffield, Alberta, and *Water Act* Amending Approval Nos. 00022289-00-01 and 00022289-00-02 to Parkland County in connection with the gravel pit.

Between April 27 and May 23, 2006, the Environmental Appeals Board received 33 Notices of Appeal from 8 appellants. Mediation meetings were held but no resolution was achieved, so the Board scheduled a hearing of the appeals. The Board determined that the issues to be heard at the hearing were:

1. Do the terms and conditions of the Approvals and Licence (including the terms, monitoring, complaints process, mitigation and remedial measures, and reclamation) adequately deal with the direct, indirect, and cumulative impacts of the project on the environment (including air quality, water quality and quantity, land, noise, and vibrations) and the health of the residents?
2. Did the Approval Holders adequately consider alternative methods, practices, and locations for the project, including the washing and crushing facilities?
3. Were the assessments completed and the baseline data collected for the application appropriate to represent the area and therefore be used as a basis for the Director to apply appropriate terms and conditions?
4. Did the Director consider all other applicable legislation, policies, and programs that could have influenced his decision prior to making his decision to issue the Approvals and Licence?

After reviewing the submissions and hearing the evidence, the Board recommended that Amending Approval Nos. 00022289-00-01 and 00022289-00-02 to Parkland County be confirmed as issued as no evidence was presented to demonstrate any environmental impact as a result of these amending approvals. One amending approval was administrative, reflecting the name change from the County of Parkland to Parkland County. The second amending approval allowed for the temporary diversion of the Bellhouse Water Management Project.

The Board recommended Licence No. 00203992-00-00 be varied to require a minimum of 13 wells be established as and when required by the Director. The Board recommended the Licence be varied to include the nearby subdivisions of Westland Park 1 and 2 and Highland Acres within the minimum distance specified by the Director for the complaint process.

The Board recommended Approval No. 00204375-00-00 be confirmed as issued.

The Board recommended Approval No. 203803-00-00 be varied: to require that Burnco monitor for TSPs and PM_{2.5} during the operational phase; to require continuous monitoring for noise for at least one year during operations with the monitoring reports indicating peak noise levels not just averages; to require regular monitoring of noise after the year of continuous monitoring for noise; and to include a complaint investigation process that mirrors the process outlined in Licence No. 00203992-00-00.

The appeals of Ms. Jean Morrison and Mr. Gordon Phillips were dismissed for failing to attend the hearing and provide the Board with the additional information requested.

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I. BACKGROUND

[1] On March 23, 2006, the Director, Northern Region, Regional Services, Alberta Environment (the “Director”), issued Approval No. 00204375-00-00 under the *Water Act*, R.S.A. 2000, c. W-3, Approval No. 203803-00-00 under the *Environmental Protection and Enhancement Act*, R.S.A. 2000, c. E-12 (“EPEA”), and *Water Act* Licence No. 00203992-00-00 (the “Licence”) to Burnco Rock Products Ltd. (“Burnco”) for the operation of a gravel pit near Duffield, Alberta, and *Water Act* Amending Approval Nos. 00022289-00-01 and 00022289-00-02¹ to Parkland County in connection with the gravel pit.²

[2] Between April 27 and May 23, 2006, the Environmental Appeals Board (the “Board”) received 33 Notices of Appeal from the following persons:

Mr. Don Meredith, Appeal Nos. 06-011, 06-012, 06-013, 06-038, 06-039;
Ms. Paula McGinnis, Appeal Nos. 06-014, 06-015, 06-016, 06-017, 06-018;
Ms. Laura Peaire, Appeal Nos. 06-019, 06-020, 06-021, 06-042, 06-043;
Mr. Mike Agostini, Appeal Nos. 06-022, 06-023, 06-024, 06-044, 06-045;
Ms. Brenda Reddekopp, Appeal Nos. 06-028, 06-029, 06-030;
Ms. Jean Morrison, Appeal Nos. 06-025, 06-026, 06-027, 06-047, 06-048;
Ms. Jean Siminiuk, Appeal Nos. 06-032, 06-033, 06-034, 06-048, 06-049; and
Mr. Gordon Phillips, Appeal No. 06-046,

(collectively the “Appellants”)³ appealing the Approvals and Licence.

[3] Between May 1 and 23, 2006, the Board wrote to the Parties acknowledging receipt of the Notices of Appeal and notifying the Director and Approval Holders of the appeals. The Board requested the Director provide the Board with a copy of the records (the “Record”) relating to these appeals and the Parties provide available dates for a mediation meeting,

¹ In this Report and Recommendations, the Board will refer to *Water Act* Approval No. 00204375-00-00, EPEA Approval No. 203803-00-00, *Water Act* Licence No. 00203992-00-00, and *Water Act* Amending Approval Nos. 00022289-00-01 and 00022289-00-02 collectively as the “Approvals and Licence.”

² In this Report and Recommendations, collectively, Burnco and Parkland County will be referred to as the “Approval Holders.”

³ In this Report and Recommendations, the Appellants do not include Mr. Don Meredith, as his appeals were withdrawn before the Hearing. The Appellants, Approval Holders, and Director will be referred to, collectively, as the “Parties.”

preliminary meeting, or hearing. On June 5, 2006, the Board received a copy of the Record from the Director, and on June 13, 2006, the Board forwarded a copy to the Appellants.

[4] According to standard practice, the Board wrote to the Natural Resources Conservation Board and the Alberta Energy and Utilities Board (“AEUB”) asking whether this matter had been the subject of a hearing or review under their respective legislation. Both boards responded in the negative.

[5] On July 12, 2006, Ms. McGinnis applied for a Stay of the Approvals. The Board asked the Appellants to respond to the Stay request.⁴ The Appellants provided their responses between July 24 and 26, 2006. The Board notified the Parties on August 8, 2006, that the Stay request was denied, and the Board provided its reasons for the denial in the same letter.

[6] After canvassing for the most suitable date, the Board notified the Parties that a mediation meeting would be held on August 16, 2006. The Mediation Meeting was held on August 16, 2006, and a series of subsequent meetings were held (September 10, 2006, January 11, 19, and 23, 2007, and February 12, 2007) in an attempt to resolve the appeals. No resolution was reached, and on August 17, 2007, the Board notified the Parties that the appeals would be proceeding to a Hearing on December 12 and 13, 2007.

[7] On August 10, 2007, Burnco requested that issues be set for the Hearing. The Board set the submission process, and submissions were received from Ms. Laura Peaire, Mr. Mike Agostini, Ms. Paula McGinnis, Ms. Brenda Reddkopp, Ms. Jana Siminiuk, Burnco, and the Director on September 12, 2007. Response submissions, including a submission from Parkland County, were received from September 19 to October 1, 2007. Ms. Reddekopp provided her response submission on October 5, 2007. The Board did not receive submissions from Mr. Don Meredith, Ms. Jean Morrison, or Mr. Gordon Phillips.

⁴ In the Board’s letter of July 14, 2006, the Appellants were asked to provide responses to the following questions:

- “1. What are the serious concerns that the appellants have that should be heard by the Board?
2. Would the appellants suffer irreparable harm if the Stay is refused?
3. Would the appellants suffer greater harm for the refusal of a stay pending a decision of the Board on the appeal, than BURNCO Rock Products Ltd. and Parkland County would suffer from the granting of a Stay; and
4. Would the overall public interest warrant a Stay?”

[8] On October 31, 2007 the Board notified the Parties that the issues to be heard at the Hearing were:

1. Do the terms and conditions of the Approvals and Licence (including the terms, monitoring, complaints process, mitigation and remedial measures, and reclamation) adequately deal with the direct, indirect, and cumulative impacts of the project on the environment (including air quality, water quality and quantity, land, noise, and vibrations) and the health of the residents?
2. Did the Approval Holders adequately consider alternative methods, practices, and locations for the project, including the washing and crushing facilities?
3. Were the assessments completed and the baseline data collected for the application appropriate to represent the area and therefore be used as a basis for the Director to apply appropriate terms and conditions?
4. Did the Director consider all other applicable legislation, policies, and programs that could have influenced his decision prior to making his decision to issue the Approvals and Licence?⁵

[9] Submissions for the Hearing were received from the Parties between November 23 and 27, 2007. No submissions were received from Ms. Jean Morrison and Mr. Gordon Phillips.

[10] On November 28, 2007, Mr. Don Meredith advised the Board that he was withdrawing his appeals. A Discontinuance of Proceedings was issued on December 6, 2007.⁶

[11] In response to the Board's Notice of Hearing, intervenor requests were received from Mr. Lee and Ms. Marlene Marczak and family, Mr. Gary Butterfield, Mr. Rick Green, and Ms. Jennifer Morin (collectively, the "Intervenors"). On November 23, 2007, the Board notified the Parties and the Intervenors that the Intervenors could participate through written submissions only. The Intervenors' submissions were received November 29, 2007.

[12] The Hearing was held on December 12 and 13, 2007.

⁵ See: Issues Decision: *Meredith et al. v. Director, Central Region, Regional Services, Alberta Environment*, re: *Burnco Rock Products Ltd. and Parkland County* (5 November 2007), Appeal Nos. 06-011-030, 032-034, 038-039, 042-049-ID1 (A.E.A.B.).

⁶ See: *Meredith v. Director, Central Region, Regional Services, Alberta Environment*, re: *Burnco Rock Products Ltd. and Parkland County* (06 December 2007), Appeal Nos. 06-011-013 and 06-038-039-DOP (A.E.A.B.).

II. SUBMISSIONS

A. Appellants

1. Ms. Laura Peaire

[13] Ms. Peaire explained she is totally dependent on groundwater, so the decision to allow Burnco to dewater and divert water has the potential to affect her water supply. She stated there is connectivity between the surficial and bedrock aquifers and Burnco's consultant advised that 20 percent of the rainfall goes to the bedrock aquifer. Ms. Peaire noted the Prairie Farm Rehabilitation Administration regional groundwater study stated there is permeability between the surficial deposits and the bedrock aquifer in more than 85 percent of Parkland County, including areas close to or including Burnco's development area. Ms. Peaire stated Burnco recently announced the consultant's initial report was off by 4 to 5 times in predicted groundwater flow. She explained the increased groundwater flow could result in increased mounding. She stated her land was described in Burnco's application as an area of probable groundwater discharge, and Burnco's response was that the map may not be accurate for that area and any wet areas on her property were likely due to surface water pooling. Ms. Peaire stated it does not appear Burnco did further testing to determine if recorded higher transmissivity levels resulted from fractured bedrock.

[14] Ms. Peaire stated the Burnco operations pose health risks to her and her family. She argued nothing was provided to prove that constant exposure to levels of Total Suspended Particulate ("TSP") and 10 micron particulate matter ("PM₁₀") that exceed the 24 hour guidelines would not pose a health risk. She noted that the information provided indicates predicted mortality risk for PM₁₀ above background is the same as for Edmonton, and the long term cancer and non-cancer hazard from diesel particulate matter would not be greater than that experienced by urban residents. Ms. Peaire stressed they do not live in an urban area, and she moved to avoid exposure to urban pollutants and noise and health risk levels. She argued the studies were based on urban levels, and the studies include averages that may not reflect the true impacts on the health of the residents. She argued no long term studies were provided to demonstrate that gravel operations have no negative impact on water, environment, wildlife, and human health and safety. She argued children are more susceptible to dust, diesel, emissions, and particulates,

because they breathe faster than adults and have smaller organs. She argued that dust associated with gravel operations cannot be completely mitigated.

[15] Ms. Peaire explained she is subjected to noise from all aspects of the development, including extraction, processing, and hauling. She stated noise and emissions from the hauling trucks need to be addressed. She explained the noise from the Burnco operations affects her enjoyment of spending time outside. Ms. Peaire noted monitoring data showed an average noise level at the extraction site of 41 dBA, which would be low since averages do not show the highest levels. She stated land bordering the extraction site had a predicted noise level of 54 dBA. Ms. Peaire stated the noise prediction of the gravel operation is a large jump from the average at the extraction site before development, and noise levels are influenced by temperature and wind. She stressed that the area is rural and therefore noise levels should not be compared to Edmonton with 65 dBA. She explained she hears the noise of the development all day long, and it is not drowned out with urban noises and traffic. Ms. Peaire stated the noise monitor was in the “shadow zone” and therefore did not accurately reflect the true intensity of noise from the Burnco operation. She argued the noise created by gravel operations cannot be mitigated enough to blend into a quiet rural residential area.

[16] Ms. Peaire stated sightings of wildlife in the area have become less regular since Burnco started construction. She explained wildlife was one of the reasons she moved to the area. She stated Burnco’s plans to protect wildlife are only for the section Burnco is mining, but wildlife on neighbouring lands would also be affected.

[17] Ms. Peaire noted that the Westland Park Community Hall water well was identified as one likely to be affected by the Burnco operation. She explained she is president of the Westland Park Community League, and no one from the executive had been contacted by Burnco to discuss alternatives should something happen to the well or its equipment. Ms. Peaire noted that Burnco proposed monitoring water levels at the Westland Park Community Hall at least weekly, but this had not been addressed with the Westland Park Community League and therefore, the monitoring program submitted by Burnco had not been carried out. Ms. Peaire stated dust and diesel from trucks and equipment detract from the use and enjoyment of the community hall, making it less attractive for rentals and resulting in loss of income. Ms. Peaire stated there is a split in the community over the Burnco operation.

[18] Ms. Peaire stated Approval No. 203803-00-00 does not require Burnco to submit records of samplings or analyses. She recommended that, at minimum, the records should be submitted frequently during the first year and then adjusted gradually once Burnco has demonstrated findings match the consultants' predictions and statements in the application.

[19] Ms. Peaire questioned the time frame specified by the inspector to start and complete the replacement of overburden and material addressed in condition 3.1.12 of Approval No. 203803-00-00. Regarding condition 3.5.1 of the same approval, she questioned whether the inspector confirmed that only water would be used as a dust suppressant, because the application states water and oil and dust suppressants will be used. Ms. Peaire stated the use of chemicals to control dust could potentially increase health risks and groundwater contamination in the area.

[20] Ms. Peaire stated that receiving the Groundwater Monitoring Program prior to the issuance of the Approvals and Licence would have ensured all matters were sufficiently addressed. She questioned whether the Groundwater Monitoring Program had been authorized by the Director as required in condition 4.1.3 of Approval No. 203803-00-00, because dewatering operations had started at the Burnco operation. Ms. Peaire referred to condition 4.1.9 of that Approval and argued it would be reasonable for the Director to ask for more frequent reporting on groundwater monitoring instead of once a year because problems could intensify over that length of time. She stated this should also apply to the Licence, to ensure data coincided with predictions in the application.

[21] Ms. Peaire stated the application and newspaper notice referred to the diversion rate as 18,250 m³/year, which is 50 m³/day, but the Licence was issued for a maximum diversion rate of 124 m³/day with an annual amount of 18,250 m³. She questioned how an aquifer with an estimated flow rate of 80 m³/day could yield and sustain a diversion rate of 124 m³/day.

[22] Ms. Peaire argued the Director should have included conditions in Approval No. 203803-00-00 to address complaints, similar to the Approval and Licence issued under the *Water Act*. She stated including a complaint process might help alleviate some of the Statement of Concern filers' concerns. Ms. Peaire addressed the complaint investigation requirements in condition 5.0 of the Licence that requires the Director to specify a distance from the pit in which water users are to be provided with contact names and numbers of Burnco or its representative.

Ms. Peaire argued the Director failed to provide the specified distance in writing. She suggested the specified distance should include, at minimum, all residents in adjacent subdivisions. She recommended the Licence include provisions to have matters dealt with immediately and to ensure water users in the area can contact a live person 24 hours a day. Ms. Peaire argued a complaint process should have been in place prior to issuance of the Approvals and Licence. She suggested including contact names and numbers of Burnco and Alberta Environment in the Approvals and Licence. She recommended a complaint process be in place to address all complaints related to the operation, not just water concerns.

[23] Ms. Peaire explained the Bellhouse Water Management Project addressed in Approval No. 00204375-00-00, was designed to drain naturally occurring wetlands for agricultural purposes. She stated the Director approved further dewatering and removal of peat, resulting in a wetland which the lands currently do not have.

[24] Responding to whether the Approval Holders had considered alternative methods or locations for the project, Ms. Peaire explained Burnco owns land near Keephills with approximately the same amount of gravel and in Acheson Industrial Park where it has a precast plant. She said that in response to her Statement of Concern, Burnco only addressed development economics at the current location.

[25] Ms. Peaire addressed several other issues. She argued the map supplied by Burnco in its application was not accurate and questioned what other materials included in the application were not accurate. She pointed out that although the application stated that the Burnco operation would not be operating from November to March, the facility was still operating on November 25, 2007. She noted the application was based on a lower number of trucks than what Burnco had advised the community. She questioned how the development supports the Water for Life Strategy, including cumulative and long term impacts and the importance of preserving and protecting water. She questioned why the Ground Water Monitoring Program was not due until after the Approvals and Licence were granted. Ms. Peaire stated a three metre buffer from all boundaries is not an appropriate distance because no studies were completed to determine what impacts there might be to residents, wildlife, and water.

[26] Ms. Peaire stated the legislation allows residents to be involved in decision making, but in this case, the Statement of Concern filers were not involved and information was withheld from them. She argued communication with the Statement of Concern filers was limited, but there was regular communication between the Director and Burnco.

[27] Ms. Peaire stated the Director advised residents that "...Alberta Environment cannot and does not refuse applications, that they only make conditions..." and "...Alberta Environment does not consider potential or cumulative effects, they only look at the application on the table."⁷ She questioned why Burnco was allowed to make changes affecting its approval. She highlighted the Sameng Report⁸ that suggested a salvage distance of 5 and 3 metres instead of the 15 and 10 metres in the approvals, and the request of an exemption of the 60 metre buffer zone next to a watercourse, which was included in the Bellhouse Water Management Project.

[28] Ms. Peaire noted the Director relied heavily on material submitted by Burnco and its consultants. She stated Burnco reviewed the draft approvals and licence, but the Statement of Concern filers were not given the opportunity even though the option is available to the Director. She argued that had the residents and their concerns been treated with the same respect as Burnco, the Director's decision or conditions in the Approvals or Licence may have been different. Ms. Peaire stated that Alberta Environment staff were aware that this was a contentious operation, "...should have been more professional and willing to work with residents in the same friendly manner they dealt with the applicant."⁹

[29] Ms. Peaire argued the cumulative effects of the gravel operation would impact her quality of life, her use and enjoyment of her property, her water, the community, her health, and the environment. She submitted that the Approvals and Licence should be revoked.

2. Mr. Mike Agostini

[30] Mr. Agostini had numerous water issues, including the impact the operation would have on the aquifer and how disrupting groundwater flow would affect his property,

⁷ Ms. Peaire's submission, dated November 26, 2007.

⁸ See: Sameng Inc., Highway 16 North Gravel Extraction & Processing operations, Development and Reclamation Plan SE 16-53-03-W5M & NW 22-53-03-W5M, September 2003.

⁹ Ms. Peaire's submission, dated November 26, 2007.

creeks, and lake. He explained water from the extraction site flows to his land and that creeks and lakes on his property are spring fed. He stated he made numerous requests to Burnco for information regarding water flows, aquifers, natural springs, and the consultant's reports from Burnco regarding his lands, but Burnco did not provide the material to him.

[31] Mr. Agostini expressed concern regarding the dust, noise, and health risks associated with the development and questioned the effect the extraction and processing will have on the wildlife on his property.

3. Paula McGinnis

[32] Ms. McGinnis referred to the Toxcon Report,¹⁰ the baseline data used, and results obtained to address health issues related to the operation. She explained there is current information on effects of diesel particulates, changes in air quality standards, increased asthma in children and resulting stress on the health care system and treatment issues, including the effects of asthma medications. She questioned baseline data and results in the Patching Associates Acoustical Engineering Ltd. report¹¹ which stated that House 1, which is close to her residence, has noise levels that exceed acceptable levels even though it is protected by a berm. Ms. McGinnis explained her residence "...is on a hill, out of the 'shadow zone' of protection that House 1 enjoys."¹² She explained recent experiences confirm noise levels are intrusive and unacceptable to her and her family. She stated the limits for noise relating to Occupational Health and Safety are industry related, not residential.

[33] She questioned whether the wildlife using the peat bog and marsh on her property will be affected. She stated several sensitive wildlife species are in the area and Burnco's operations could adversely affect them and livestock. She stated the operations have driven mice, foxes, and coyotes from the field behind her home to her area. She argued this would upset the ecosystem and is a reasonable explanation for the sudden disappearance of multiple pet cats. She said she believed Burnco's operation has driven moose from their usual territory.

¹⁰ See: Toxcon Health Sciences Research Centre Inc., A Human Health Risk Assessment of Burnco's Proposed Highway 16 North Gravel Pit, October 2003.

¹¹ Patching Associates Acoustical Engineering Ltd., Noise Study for the Proposed Burnco Highway 16 North Project Final Project, September 2003.

[34] Ms. McGinnis questioned how the depression in the reclaimed area would impact water flow, drainage, and recharge in the area. She stated the land reclamation aesthetics plan attempted in fall 2006 was not yet complete. She argued the plan to leave a depressed area and large slough is neither desirable nor a recommended reclamation practice. She argued the huge swamps of water would increase the mosquito population and thus the risk for West Nile virus.

[35] Ms. McGinnis expressed concern that considering the dangers of dust and diesel particulates, monitoring is done on averages, including times when the activity being monitored is not operating. She referred to performance measures agreed to by Burnco including the requirement that during operations, location, flow rate, and quality of surface and groundwater features were to be monitored and impacts reviewed with the Smithfield Community Advisory Group (“Advisory Group”) to address issues that may arise.¹³ According to Ms. McGinnis, the Advisory Group was notified that an application may be made to dig another pit because there was too much water, but the Advisory Group had not been notified or issues discussed. She stated the committee has not been provided ambient air quality monitoring data and questioned why only dust was being monitored. She stated it has been a real issue to receive monitoring information from the regulatory authorities.

[36] Ms. McGinnis had several other issues. She questioned whether wells in the subdivision will be affected by the operation, because it was confirmed by Burnco’s consultants that one in five wells will likely be affected. She explained there are alternatives to the Burnco operation, including using a dry pit method or denying the operation, a relatively insignificant gravel producer in the world market. Ms. McGinnis questioned whether the Saskatchewan River Watershed was considered in the Director’s decision. She questioned if there was an assessment completed to evaluate the impact of heavy equipment vibrations. She explained there are four rural subdivisions plus three agricultural residences affected by the Burnco operation. She argued that there are several gaps in the Westworth Environmental Baseline Study¹⁴ that should have been questioned and addressed. She stated that given Burnco and the Director knew it would be a contentious pit, everything should have been done to ensure the residents were

¹² Ms. McGinnis’ submission, dated November 25, 2007, at page 2.

¹³ See: Ms. McGinnis’ submission, dated November 25, 2007, at page 5.

protected, and Burnco's desire to bring a quick resolution should not result in "...sloppy study requirements and analyses."¹⁵

[37] Ms. McGinnis asked the Approvals and Licence for the Burnco operation be reversed, but in the alternative, to have conditions included to ensure the residents in the area are protected.

4. Ms. Brenda Reddekopp

[38] Ms. Reddekopp questioned the distance within which complainants must live from the pit before complaints will be investigated, because she is located one kilometre from the site. She was concerned whether her well was one of the one in five wells that may be affected by Burnco's operation. She questioned how a landowner can prove Burnco's operation caused a water shortage and why it is the responsibility of the landowner to prove it. Ms. Reddekopp sought assurance that Burnco would fix her well and equipment if it was caused by Burnco's operation. She noted the Westland Park Community Hall well was one of the wells Burnco stated would likely be affected by its operation. She stated water softening equipment was installed into the hall within the past two years.

[39] Ms. Reddekopp stated Burnco is allowed to remove 124 m³ of water from the aquifer, but there is 80 m³ of water flowing through the aquifer daily and residents of Westland Park Residential Subdivision use 62.7 m³. She questioned how Burnco would be able to pump an equivalent of 50 m³ per day without adversely affecting the residents.

[40] Ms. Reddekopp was concerned with dust and noise from the operations and how the operation does not fit with the quiet rural setting she lives in. She stated she lives in Westland Park 2 Residential Subdivision and should not hear the noise, but she hears the trucks dumping their loads and the back up beepers. She stated the noise is louder than the traffic on Highway 16. Referring to the Patching Associates Acoustical Engineering Ltd. Report, Ms. Reddekopp questioned how they estimated noise levels on the west side of the operations when the report refers to estimates of noise levels in Highland Acres 1, located on the east side. She

¹⁴ See: Westworth Associates Environmental Ltd., Environmental Baseline Study Highway 16 North – Phase 1, September 2003.

¹⁵ Ms. McGinnis' submission, dated November 25, 2007, at page 6.

explained she has been diagnosed with asthma, and dust from the gravel pits and fumes from the trucks will not help her condition. She believed Burnco's operation will cause her asthma to get worse and may have triggered it.

[41] Ms. Reddekopp stated she does not trust Burnco because of the false promises made to the residents.

5. Ms. Jana Siminiuk

[42] Ms. Siminiuk was concerned with all aspects of the Burnco operation. She stated it has impacted her life violently, affecting part of her income, her spiritual well-being, her and her daughter's health, and her daughter's education.

[43] Ms. Siminiuk raised several health issues. She expressed concern regarding cumulative air quality impacts, including particulate matter from the excavation, processing, and truck fumes. She argued she would not tolerate dust and particulate matter, because she has "...a right to clean air, clean water and the enjoyment of our property."¹⁶ Ms. Siminiuk stated she has been able to alleviate her allergies, partly through breathing clean country air, and she wants to protect her daughter from developing bronchial conditions. She explained she has asthma and has been able to control it with yoga, but when the pits started last year, she could no longer control her allergies with yoga. She expressed concern about the increased noise pollution from the increased truck traffic, explaining that constant, monotone, low level noise causes stress that could affect the autonomic nervous system. She was opposed to city noise levels in the country. She explained she hears the noise of trucks and the rumbling of rocks when she wakes up in the morning and during the day. She stated the berms are totally ineffective for reducing noise levels. She said she is suffering from daily stress due to the operation. She explained her acreage provides for her mental and spiritual health, but the noise from the Burnco operation has aggravated her stress and anxiety.

[44] Ms. Siminiuk explained she chose to live in a farming community and values the natural environment around her residence. She stated her growing businesses, including organic small scale farming, alternative crops, and landcrafting, would be affected. She wants to

¹⁶ Ms. Siminiuk's submission, dated May 2, 2006.

maintain and expand her yoga business, but no students would want to come to an area with high levels of dust and noise. She explained that she depends on her gardens for food, education, and for her natural products business. Ms. Siminiuk believed the Smithfield area could provide eco-tourism opportunities to visit its water bodies and bogs, and provide agri-tourism with conventional farming, alternative crops, and wild crafting.

[45] Ms. Siminiuk stated there is high biodiversity in the area, and she relies on the birds and bees in her farming operations. She stated she has seen fewer bees since construction started, and she relies on the bees to pollinate her food and herbs. She stated there are fewer plants and animals in the area, except gophers and mice are looking for new homes. She expressed concern that Burnco's consultants conducted a plant survey in November and therefore did not know about some species in the area. Ms. Siminiuk explained water and wildlife patterns in the area are north to Lac Ste Anne and south to Johnny's Lake, Kilini Creek, and the Sturgeon River. She stated moose and deer migrate along the corridor.

[46] Ms. Siminiuk argued the Director failed to follow Alberta Environment's own procedures, respond to her Statement of Concern, acknowledge the importance of the Smithfield area and the community, acknowledge public lands, and incorporate cumulative impacts. She was concerned with communication between Approval Holders and area residents. She stated the Advisory Group meetings did not address concerns of residents. She expressed concern that the Approvals expire in 2016. Ms. Siminiuk argued the archaeological study done for Burnco was of no value because of the methods used and the exclusion of historical research.

[47] Ms. Siminiuk stated she is not opposed to gravel development but does not support current methods and practices. She argued Burnco did not investigate alternatives and pushed current procedures, including pit mining, dewatering and mining below the water table, and washing and screening in a rural community instead of in an industrial area. Ms. Siminiuk explained Burnco has industrial land in the Acheson industrial area, but it would have to pay for its water. She argued dewatering is no longer an acceptable practice.

[48] Ms. Siminiuk raised issue with the complaint investigation process and argued the community, not the Director, should set the distance to be included in the complaint process. She stated that complaints need not be written but must be valid and the complaint response

should be within 24 hours. Ms. Siminiuk stated the residents should not be expected to do the work of Alberta Environment.

[49] Ms. Siminiuk had various water issues. She argued there is connectivity between the confined and unconfined aquifer.¹⁷ She stated the bedrock is cracked, her well responded to seismic activity in the area, and the subsoil has many fractures and small layers. She noted that no study of the area had been conducted on subsurface media and water flows from a gravel extraction operation before the pit, during pit operation, and post pit. She stated the use of water for dust control is not accounted for in the Approvals or Licence.

[50] Ms. Siminiuk raised monitoring and reclamation issues. She argued the Groundwater Monitoring Program is not acceptable, and third party sampling should be required. She argued a three meter buffer is not sufficient. She stated reclamation must be done correctly without the use of chemical fertilizers, and the community should approve the seed mixture.

[51] Ms. Siminiuk was concerned with traffic and truck safety on local roads and on Highway 16. She stated there is a fear of more accidents and deaths caused by gravel trucks, and she was told of incidents where school buses were run off the road by gravel trucks. She stated Parkland County cannot control the gravel trucks. She did not believe tax dollars should go to patrolling trucks, and industry should be responsible for policing and associated costs.

B. Approval Holders

1. Burnco

[52] Burnco explained that in 2002, it bought and leased seven quarter sections on the east and west sides of Range Road 33, north of Highway 16, to establish a gravel extraction and processing operation. To achieve required endorsement and support within the community, Burnco stated it retained independent experts to provide a development and operational plan; research operation impacts with a view to mitigating negative impacts and optimizing the

¹⁷ See: R.A. Freeze and J. A. Cherry, *Groundwater* (Englewood Cliffs: Prentiss Hall, 1979) at 47 and 48. A confined aquifer is an aquifer confined between two less-permeable geologic layers and occurs at depth. An unconfined aquifer is an aquifer in which the water table forms the upper boundary near the ground surface. “In a confined aquifer, the water level in a well usually rises above the top of the aquifer....The water level in a well in an unconfined aquifer rests at the water table.”

positive; address concerns and issues of local residents, interest groups, and stakeholders; and facilitate a public process to incorporate community impacts, interests, issues, and concerns in an open, respectful, and accountable manner. Burnco explained it contacted, informed, consulted, and engaged local residents, Parkland County, and other stakeholders affected by the project through newsletters, regular personal contact, and correspondence by telephone, mail, e-mail, one-on-one stakeholder interviews, and two open house meetings. Burnco stated some or all Appellants attended the meetings and participated in the consultation process. The issues raised within the community included groundwater, noise, traffic, air quality, property values, dust, safety, health, wildlife, visual impacts, and reclamation and socio-economic matters.

[53] In response to the concerns raised, Burnco stated it formed the Advisory Group with representatives from Parkland County and Alberta Environment and community members. Burnco said the Advisory Group met on numerous occasions, resulting in development of the Smithfield Community Advisory Group Performance Measures (the “Performance Measures”). Burnco substantially accepted all performance measures to address issues identified by residents, Parkland County, and other stakeholders, and confirmed it continues to govern its operation according to these Performance Measures. Burnco stated it is committed to continue participating in the Smithfield Community Advisory Group or replacement group to ensure the community has a forum to raise its concerns with Burnco. Burnco agreed to develop and finalize monitoring and remediation programs with the group. Burnco explained a committee was also formed with Burnco, other gravel operators, Parkland County, Alberta Environment, and local residents to discuss how gravel operations in Parkland County could be managed to best mitigate landowner concerns.

[54] Burnco stated the conditions of the Approvals and Licence adequately address the concerns expressed by the Appellants and demonstrate the Director properly considered all issues raised in the Statements of Concern. Burnco stated direct, indirect, and cumulative impacts of the project on the environment and health of the residents, monitoring, complaints, mitigation, and remedial measures have been adequately dealt with. Burnco stated the “...conditions are far-reaching, many were volunteered and all were agreed to by BURNCO.”¹⁸

¹⁸ Burnco’s submission, dated November 26, 2007, at page 9.

Burnco argued the ongoing monitoring and reporting and the complaint process suggest the conditions are adequate.

[55] Burnco stated reports it commissioned indicate little or no effect from the project and any effects could be mitigated by measures implemented by Burnco. It argued the project is relatively straight forward, and environmental impacts of gravel pits are well understood. Burnco stated the potential impact of the operation is small and mitigative measures it proposed will address cumulative impacts, because measures to monitor and mitigate any effects are state of the art and generally of a higher standard than many other operators in the industry.

[56] Burnco explained it retained Toxcon Health Sciences Research Centre Inc. and Zelt Professional Services Inc. to conduct a Human Health Risk Assessment to determine if potential emissions from the proposed project could adversely affect human health in the area. The consultants concluded the gravel pit would have negligible adverse health effects for SO₂, NO_x, CO, polycyclic aromatic hydrocarbons, volatile organic compounds, silica, and metals. Burnco stated the predicted concentration could exceed the 24 hour guidelines for total suspended particulate (“TSP”) and PM₁₀ and lead to occasional nuisance dust levels, but exposure hazard would be low and incremental mortality risk for PM₁₀ above background would be similar to Edmonton air quality. Burnco explained it chose a more stringent monitoring program for 2.5 micron particulate matter (“PM_{2.5}”) rather than PM₁₀ because PM_{2.5} particles are of more concern to human health. Burnco explained predicted diesel particulate matter emissions would add to the local level, but not cause any hazard greater than that experienced by urban residents.

[57] Burnco argued the overall findings predicted air quality from the project would be within acceptable limits, but recommended reducing particulate emissions in the first year. Burnco explained it implemented measures to reduce particulate emissions by paving Range Road 33 to reduce dust and particulates by gravel trucks, sweeping paved roads and watering unpaved roads within its operation sites, imposing a 30 km per hour speed limit in the gravel operations, enclosing its crushing equipment with an insulated tarping system, and constructing substantial, landscaped berms. Burnco stated it was committed to installing rubber liners at all transfer points and on gravel crushing and washing equipment. Burnco stated Promet Environmental Group Ltd. was retained to conduct dust monitoring. Initial results indicate total

suspended particulate levels dropped off after construction and PM_{2.5} did not vary noticeably from baseline; both remained well below the Alberta Ambient Air Quality TSP Objective.

[58] Burnco stated Patching Associates Acoustical Engineering Ltd. was hired to evaluate and predict noise levels from the operations. Burnco explained the potential sources for noise include crushing and washing plants, generators, loaders, conveyors, pumps, and gravel trucks, and from time to time, excavators, scrapers, dozers, and trucks. Based on the selected scenario, Burnco explained predicted noise levels would be below Edmonton's residential area 65 dBA daytime level and below its 50 dBA nighttime level. Burnco stated one exception was a resident that would be affected by traffic noise from Highway 16. Burnco explained noise was to be reduced by the berms along the west and south sides of the gravel extraction area, the 30 km per hour speed limit within work areas, the elimination of jake brakes use, the enclosed crushing equipment, and the use of back up strobe lights instead of beepers during night time operations. Burnco said it retained Promet Environmental Group Ltd. to conduct sound monitoring. Burnco admitted noise levels were noticeably higher during construction, but construction is now complete and levels did not vary much at the processing area because sound readings were dominated by highway traffic.

[59] Burnco stated it retained Hydrogeological Consultants Ltd. to conduct a groundwater review to assess the impact of diverting 50 m³/day of groundwater on the water level in the gravel aquifer and existing water wells in the area of the project.¹⁹ Burnco explained it estimated needing 18,250 m³ per year of groundwater for its washing facility, which amounts to 50 m³ per day. Burnco stated groundwater removed from the pit that is not required for washing would be reintroduced into the gravel aquifer.

[60] Burnco stated there would likely be less than one metre of mounding up-gradient of the mining operation due to removal of the gravel aquifer. Burnco stated it has taken steps to address excess water in the area and met with Alberta Environment and Parkland County to discuss best handling practices. It explained the initial modeling of the area suggested there would be a relatively small amount of water moving through the sand and gravel layer, but after

¹⁹ See: Hydrogeological Consultants Ltd., Burnco Rock Products Ltd. Wabamun Area 22-053-03-W5M Proposed NW 22 Gravel Pit – Groundwater Review, September 2003, and Hydrogeological Consultants Ltd.,

starting mining operations, a greater volume of water was found so Burnco changed its mining and sequencing plans. That information was shared with residents during community meetings in June and September, 2007. Burnco explained additional modeling studies are being conducted to determine if amendments to the Approvals and Licence will be required.

[61] Burnco stated the majority of the water wells in the area are completed in bedrock aquifers, below the weathered portion of the bedrock surface and were predicted to be unaffected by the operation. Burnco stated 10 wells were identified as being in aquifers that could be hydraulically connected to the gravel aquifer, including the Westland Park Community water well, three domestic wells, and three stock watering wells. Burnco stated that none of the wells will be adversely impacted by the proposed groundwater diversion. Burnco explained the closest water well to the gravel operation that is completed in the gravel aquifer is approximately 575 metres southeast of the first pit. Burnco stated the estimated drawdown from removing 50 m³ per day from the aquifer was 0.4 metres during the first year and 0.6 metres after 20 years.

[62] Burnco stated its consultants determined the risk of concentrating any heavy metals present in the sand and gravel deposit and the resultant rise in heavy metal concentration in the groundwater. Burnco explained its consultants found no elevated concentration of heavy metals in the groundwater and no abnormal concentrations of the sources of materials to be taken into solution. Burnco explained its operation is a closed loop system for washing aggregates, no detrimental additives are used in the washing process, and material washed from the sand and gravel will be stored in pits on site and the wash water will be reused. Burnco argued there was no evidence to suggest increased concentrations of heavy metals would occur in groundwater, but its consultants recommended that concentrations be monitored during the lifetime of the mining and washing operations. Burnco stated it adopted the recommendation and has started monitoring and is committed to a program of continued monitoring of groundwater in the area.

[63] Burnco stated Licence No. 00203992-00-00 and Approval No. 203803-00-00 contain conditions regarding monitoring for potential impacts on water in the adjacent area and for the investigation, remediation, and/or mitigation of impacts. Burnco committed to "...all landowners within a 1 mile radius of BURNCO de-watering operations that should there be a

material reduction in either the quality or quantity of their well-water caused by BURNCO's operations, BURNCO will remedy that problem, at BURNCO's expense."²⁰ Burnco explained it would take immediate action in the event of a water supply issue. It would provide a temporary water supply within 24 hours if the resident is without water, hire a third party consultant to determine the cause of the problem within 14 days, and provide a permanent alternate water supply if the problem is even partially due to Burnco's mining operations.

[64] Burnco discussed what it anticipated the programs to include and referred to the Performance Measures. Burnco would install monitoring wells in gravel and bedrock aquifers on the Burnco site and on or near certain landowners' properties in locations determined by Burnco in consultation with the Advisory Group. Burnco would share monitoring well data with the community group, potentially affected landowners, and the Director. If a landowner has a problem with water quality or quantity, he may contact Burnco, and Burnco will retain a consultant, as soon as it is reasonably practical, to check into the landowner's concerns, and any test results will be shared with the landowner and the Director. If the consultant determines Burnco's operation caused the reduction in water quality or quantity, Burnco agrees to replace the landowner's water supply to the quality and quantity existing prior to the start of Burnco's operation, but if the consultant determines the problem is not caused by Burnco, Burnco will, if the landowner wishes, work cooperatively with the landowner, at his or her expense, to put remedial measures in place. If the landowner does not agree with the consultant's view or proposed solution, the landowner can contact Alberta Environment. Burnco's commitment will remain in effect for as long as it is conducting gravel operations on the properties to which the Approvals and Licence relate. Contact names and numbers for Burnco and Alberta Environment will be provided and updated as required to landowners, including the Appellants.

[65] Burnco explained Hydrogeological Consultants Ltd. has been retained to continue monitoring water levels in the relevant aquifers, with 10 piezometers currently being used and an additional three piezometers to be added before the end of 2007. Burnco stated the water levels have been higher in 2007 than in 2006 before pumping began, except for one location immediately south of Pit 1, and 2007 spring recharge exceeded the volume of groundwater

²⁰ Burnco's submission, dated November 26, 2007, at page 18.

removed from the aquifer. Burnco argued the monitoring data showed no adverse change in water levels or chemical quality of the groundwater due to construction and dewatering.

[66] Burnco explained it hired Sameng Inc. to assist in developing the land use and reclamation plan. Burnco stated approximately half of the soils to be disturbed by the operation are organic peat and others are gleysols. Burnco explained its mining development was set up to facilitate direct placement of overburden, topsoil, subsoil, and peat wherever possible. Burnco explained it is committed to preserving a natural corridor and wetland on the west 300 metres of NE 16-53-03-W5M and SE 21-53-03-W5M, and these lands will be undisturbed during the operations on adjoining lands.

[67] Burnco stated Westworth Associates Environmental Ltd. was retained to perform an environmental baseline study and found no rare plant species in the proposed site. It stated the potential for rare plants in the area was low because of the little remaining, highly fragmented natural habitat in the area and the high degree of human disturbance. According to Burnco, its consultants reported that reclamation of the disturbed area with native vegetation would reduce long term impacts of habitat loss on wildlife. It suggested maintaining watercourses/drainages and associated riparian habitats would reduce long term impacts on fisheries and wildlife in the area, as would maintenance of water quality and quantity in streams. Burnco stated maintenance and/or re-establishing habitat connectivity would reduce impacts on wildlife movement and habitat use.

[68] Burnco argued it adequately considered alternate methods, practices, and location for the project, including the washing and crushing facilities. Burnco explained that as a result of the survey conducted of local residents, the crushing and washing operations were moved to SE 1-53-3-W5M adjacent to Highway 16.

[69] Burnco submitted it undertook all reasonable steps to conduct appropriate baseline assessments and modeling predictions to determine potential impact on the environment and the area. Burnco argued its assessment was appropriate to represent the area and could be used by the Director as a basis to apply appropriate conditions. Burnco explained it was not required to conduct a full environmental impact assessment, but its aim was to ensure every conceivable issue was addressed. Burnco stated its application included consultants' reports

dealing with groundwater, air quality, traffic impact assessments, heavy metals, noise, dust, property impact, health, reclamation, economic, historical resources impact, and an environmental baseline study. Burnco argued the findings of the various experts indicate the types of potential impacts would be extremely limited, the impact magnitude would be small, and the mitigative measures proposed by Burnco would sufficiently address operation effects.

[70] Burnco stated that its observation was that the review process employed by the Director was extensive, and the approach taken by Burnco and the Director went above and beyond the standards, studies, and remedial and mitigative measures that are typical for a similar project. Burnco stated it was unaware of any applicable legislation, policy, or program that was not considered by the Director.

2. Parkland County

[71] Parkland County provided information regarding the Bellhouse Water Management system and its relevance to the Burnco operation. It explained the drainage system was started by local landowners and Parkland County became involved in the early 1970s, obtaining a licence for the watercourse known as the Bellhouse Water Management project. Parkland County stated the most recent work on the system was a temporary relocation of a portion of the channel relevant to the Burnco operation. According to Parkland County, Burnco requested the realignment to optimize the area available for extraction of aggregate material from the NW 22-53-03-W5M. Parkland County explained its engineering department reviewed the realignment proposal and approved it with minor revisions. Parkland County stated the information was submitted to the Director for review, and the Amending Approval was issued. Parkland County explained the function of the channel realignment and any effect it may have on adjacent properties.

C. Director

[72] The Director explained the application was reviewed by Alberta Environment technical staff. He submitted that the authorization process under EPEA and the *Water Act* were followed. He explained the *Activities Designation Regulation*, Alta. Reg. 276/2003, (the “Regulation”) specifies which activities require an approval and which require a registration, and

Alberta Regulation 142/2004 amended the Regulation such that the construction, operation, and reclamation of a pit became a registration activity under Schedule 2, Division 3. The Director stated section 3, Schedule 1 of the *Water (Ministerial) Regulation*, Alta. Reg. 205/1998, exempts a water diversion for the purpose of dewatering a sand and gravel pit from requiring an approval.

[73] The Director explained that on November 1, 2004, the Code of Practice for Pits came into effect, making pits subject to a registration under EPEA rather than an EPEA approval. He said the Code of Practice for Pits implements the policy decision that recognizes that sand and gravel pits produce "...relatively minor emissions, have comparatively minimal potential for resource or environmental impact, and can achieve environmental protection through the use of well established, standardized and/or routine practices, processes and procedures."²¹ The Director explained that, prior to the Code of Practice for Pits coming into effect, the information required in an application for a sand and gravel pit was set out in the Guide for Pits 2000, and required information on soils, reclamation, pit water, and end land use.

[74] The Director was satisfied that the information reviewed during the processing of Burnco's application was appropriate to use as a basis to determine whether to issue the Approvals and Licence and to determine the appropriate conditions for the Approvals and Licence. He stated Burnco completed the application and included numerous expert reports based on information collected or researched that directly reflected the area in question. The Director stated Burnco's application consisted of 14 independent consultants' reports on topics including public relations, groundwater, noise prediction, air quality, noise and dust monitoring, traffic impact assessments, Range Road 33, heavy metals, property values, reclamation, public health, an environmental baseline study, economic impacts, and impact on historical resources. He said the information provided indicated the area was agricultural land with existing human disturbance, and this information was confirmed by his general knowledge of the area and subsequent inspections of the area. The Director stated the information provided by Burnco met and exceeded applicable standards and guidelines for sand and gravel applications and he

²¹ Director's submission, dated November 26, 2007, at paragraph 51.

“...was satisfied that Burnco provided assessments that adequately and more than adequately represented the area.”²²

[75] The Director noted the groundwater report prepared by Hydrogeological Consultants Ltd. used data collected from 10 monitoring sites located around the pumping well during long-term aquifer tests instead of the required one observation site as stated in Alberta Environment’s Groundwater Evaluation Guidelines. The Director stated the guidelines require field verification to be at least a one kilometer radius, but Burnco’s consultants used a 1.6 kilometre radius and calculated interference effects for locations up to 2.5 kilometres from the point of diversion. The Director explained Burnco performed short-term pumping tests on 13 domestic, domestic/stock, and stock water wells in the area, and the samples were submitted to a laboratory for routine chemical analysis.

[76] The Director stated he considered a number of methods, practices, and location for the project aimed at minimizing the potential for environmental impact. He explained he noted that Range Road 33 was paved from the extraction site to the processing site to reduce noise and dust from the trucks transporting material between the two sites; the processing site was located nearer to Highway 16 to minimize noise and dust; the diversion of the Bellhouse Water Drainage Channel ensured the flow of off-site surface water around the extraction site would not be interrupted; minimization of net water loss from the aquifer by storing excess water from the extraction site process and pit dewatering on site; and a monitoring well down gradient of the ponds at the processing site to detect impacts on groundwater.

[77] The Director stated Burnco volunteered to implement an extensive groundwater monitoring program to address concerns raised by area residents. The Director stated this type of groundwater monitoring program is relatively unique to sand and gravel operations and would not be required under the current legislation.

[78] The Director stated he considered all applicable legislation, policies, and programs that could influence his decision making on approvals and licences, including the Water for Life Strategy. He explained he reviews legislation and policies applicable to the specific activity applied for, in this case including the Code of Practice for Pits, the Wabamun

²² Director’s submission, dated November 26, 2007, at paragraph 76.

and Area Community Exposure and Health Effects Assessment Final Report, and the Parkland Sand and Gravel Resolution Committee Report. The Director stated he followed the standard practice of a Director, and given the level of concern expressed by directly affected persons in the area, he went beyond what would ordinarily be considered for a sand and gravel operation.

[79] The Director explained that his "...review of an application is conducted to determine whether the impact of the proposed activity on the environment is in accordance with the *EPEA* and the *Water Act* and the respective regulations."²³ The Director stated he was satisfied the impact from the operations would be minimal and any environmental issues could be addressed through the terms and conditions in the Approvals and Licence issued to Burnco. The Director stated the environmental outcomes from a sand and gravel operation are well known, and in most areas of Alberta, the potential incremental effects are minimal and manageable. He acknowledged the serious concerns expressed by the Appellants but found no information presented to him that "...caused him to conclude that the Burnco project would present any greater or different environmental impact than what is generally expected."²⁴ The Director believed that, based on the information provided, the Burnco operation would have incrementally less impact on the environment than what is generally expected, because of the best management practices employed by Burnco, the performance measures volunteered by Burnco, and the extensive studies and baseline data provided.

[80] The Director explained that a number of terms and conditions in the Approvals and Licence were modified or expanded to achieve environmental assurance. He stated the typical sand and gravel approval does not include provisions for groundwater monitoring, but in Approval No. 203803-00-00, groundwater monitoring is set out in conditions 4.1 to 4.19. He stated other conditions were included in this Approval to respond to concerns and to address specifics of this project. The Director referred to *Water Act* Approval No. 00204375-00-00, and explained conditions 8 and 9 were added to assure surrounding landowners that the project would not interfere with water quantity outside the extraction site. The Director explained condition 4.1(a) of the Licence ties the monitoring requirements to the monitoring wells set out in Approval No. 203803-00-00, and monitoring frequency is increased to weekly during

23 Director's submission, dated November 26, 2007, at paragraph 90.

24 Director's submission, dated November 26, 2007, at paragraph 93.

operations as opposed to only during the first year of operations. He stated condition 4.3 requires Burnco to measure the total amount of water leaving the aquifer rather than just the amount diverted to the processing site.

[81] The Director stated the Wabamun and Area Community Exposure and Health Effects Assessment final report was released in August 2006. He said Alberta Environment participated in the Parkland County Sand and Gravel Resolution Process, established by Parkland County to resolve issues between the community and the sand and gravel industry.

[82] The Director explained he can request additional oral or written information from any source he considers appropriate when reviewing an application. He explained that he can request the proponent to hold public meetings. The Director stated that, prior to making his decision, he may circulate the proposed approvals or licences to the applicant, Statement of Concern filers, or any other person the Director considers appropriate. The Director stated that only a relatively small number of requests for supplementary and additional information were made during the review process. The Director stated that each request was responded to by Burnco to the satisfaction of the Director.

[83] The Director submitted that the Approvals and Licence were issued in accordance with EPEA and the *Water Act*, and the Board should recommend that the Approvals and Licence be upheld as issued.

D. Intervenor

1. Mr. Lee and Ms. Marlene Marczak and family and Mr. Gary Butterfield

[84] Mr. and Ms. Marczak stated they live and operate a business directly east of the Burnco operation. They expressed concern with the operation regarding health risks, noise and dust, and increased traffic posing a hazard to children waiting for buses and for commuters. Mr. and Ms. Marczak stated they grow a garden each year, which will be impacted by the dust, pollution, and any impacts to the groundwater. Mr. and Ms. Marczak stated they lost clients who boarded their horses and rode at their equestrian centre because the clients chose a quieter location without the dust and pollution of the Burnco operation. They stated the horses are susceptible to dust because there are no trees to block winds from the west, and horses and riders

are put at risk on the trail because the noise from the operation can startle the horses. Mr. and Ms. Marczak expressed concern regarding the safety of their animals, including increased thefts, as more people travel into the area. They stated there is the potential problem of children playing in the pits and having bonfires that could pose the hazard of peat fires. Mr. and Ms. Marczak opposed the Burnco operation.

2. Mr. Rick Green and Ms. Jennifer Morin

[85] Mr. Green and Ms. Morin explained the extraction site is adjacent to their property line. They stated they are now experiencing sediment and odour in their water, which never occurred before. They expressed concern about the vibrations and their effect on the structure of their home and livestock. They stated they are having difficulty sleeping during the day, and they are less able to enjoy the use of their property and their animals because of the dust and noise. They expressed concern regarding the effect of the operation on their horses, including excessive coughing since the Burnco operation started, and the threat to the safety of the children working with the horses.

[86] Mr. Green and Ms. Morin stated the berms were not seeded until fall 2007, and no shrubs were planted as specified in the Burnco plan as promised. They explained that a "...BURNCO subcontractor came on to our property to post a 'no trespassing' sign on our side of the fence, because we had gone out to his machine to ask him to stop. The dust on that day was so bad it was choking us in our home. We are concerned about confrontations and invasion of our property in the event of a difference of opinion."²⁵

III. PRELIMINARY MATTERS

[87] At the beginning of the Hearing, the Board addressed Ms. McGinnis' concerns raised in her November 21, 2007 email regarding the issues set by the Board. She was concerned with cumulative effects and how future projects can be considered. The Board was satisfied the set issues adequately address cumulative effects, but it cannot consider matters that are speculative in nature. Ms. McGinnis also questioned the applicability of the environmental

²⁵ Mr. Green and Ms. Morin's submission, dated November 29, 2007.

impact assessment provisions to the project. She believed the Burnco operation was a quarry and therefore potentially a mandatory activity. As the other Parties argued, the Burnco operation is a pit and not a quarry as defined in the legislation.²⁶ Although the definition of pit and quarry may cause some confusion, in this case the term “pit” was properly applied. Therefore, the environmental impact assessment provisions of EPEA do not apply in these appeals.

[88] At the Hearing, Ms. McGinnis clarified she was representing Ms. Jana Siminiuk²⁷ and herself, and Ms. Peaire was representing Mr. Agostini, Ms. Reddekopp and herself. Ms. Jean Morrison and Mr. Gordon Phillips were not represented at the Hearing. The Board notified the Parties on November 27, 2007, that if any party did not participate in the Hearing, the Board could proceed with its decision without their input and without further notice. Any party not planning to attend the Hearing was to notify the Board to advise who would be representing them, but Ms. Morrison and Mr. Phillips did not notify the Board. Therefore, the appeals of Ms. Morrison (Appeal Nos. 06-025-027) and Mr. Phillips (Appeal No. 06-046) are dismissed pursuant to section 95(5)(iv) of EPEA for failing to provide additional information as requested by the Board²⁸ and for failing to attend the Hearing.

²⁶ Section 1(ccc) of EPEA defines “quarry” as :
“an opening or excavation in, or working of, the surface or subsurface for the purpose of working, recovering, opening up or proving
(i) any mineral other than coal, a coal bearing substance, oil sands or an oil sands bearing substance, or
(ii) ammonite shell,
and in respect of which an environmental impact assessment report is required, and includes any associated infrastructure connected with the quarry....”

Section 1(xx) of EPEA defines “pit” as:
“an excavation in the surface made for the purpose of removing, opening up or proving sand, gravel, clay, marl, peat or any other substance, and includes any associated infrastructure, but does not include a mine or quarry.”

²⁷ Ms. Siminiuk was unable to stay for the entirety of the Hearing, and when she left the proceedings, she requested Ms. McGinnis represent her.

²⁸ Section 95(5)(iv) states:
“The Board may dismiss a notice of appeal if the person who submitted the notice of appeal fails to comply with a written notice under section 92.”

Section 92 of EPEA provides:

“Where the Board receives a notice of appeal, it may by written notice given to the person who submitted the notice of appeal require the submission of additional information specified in the written notice by the time specified in the written notice.”

IV. PARKLAND APPROVALS

[89] Under appeal are two amending approvals issued to Parkland County, *Water Act* Amending Approval Nos. 00022289-00-01 and 00022289-00-02. The first of these reflected the name change of the county from “County of Parkland” to “Parkland County.” At the Hearing, the Parties were asked if they had any objection to dismissing the appeals related to Approval No. 00022289-00-01. None of the Parties objected once it was made clear that nothing else regarding the approval was being changed. This was an administrative change to the existing approval to ensure the proper name was on the approval. As none of the Parties objected to the amendment, the Board recommends Approval No. 00022289-00-01 be confirmed as issued.

[90] Amending Approval 0002289-00-02 allowed for the realignment of the Bellhouse Water Management Project in N½ 22-053-03-W5M. The Appellants provided little argument to this amendment. The Amending Approval allowed for a temporary realignment of the drainage ditch to allow Burnco to more effectively use the quarter section of land. The water flow will not be affected by the realignment and there should be no adverse environmental impact as a result of the realignment. Therefore, the Board recommends Amending Approval No. 00022289-00-02 be confirmed as issued.

V. BURNCO APPROVALS and LICENCE

A. Legislation

[91] Under section 95 of EPEA, the Board has the obligation to make recommendations to the Minister to confirm, reverse or vary the Approvals and Licence. In these appeals, the Board was reviewing two approvals and one licence issued to Burnco. As the issues intersect with the different Approvals and Licence, the Board will assess each issue and apply its recommendations to the specific regulatory document.

B. Discussion

1. Conditions of the Approvals and Licence

[92] Throughout their submissions and evidence, the Appellants and Intervenors stressed their concerns regarding the effects of the Burnco operation on their health and quality of life. The Board appreciates the concerns expressed. Clearly most of the Appellants preferred that the operation not continue. However, if the operation was allowed to continue, they provided valuable input into how the conditions of the Approvals and Licence could be varied to provide more confidence that the Approvals and Licence are in place to protect the environment and them as best as possible.

[93] The Board heard repeatedly from the Appellants about the complaint process in the Licence. There is uncertainty in the current process as to who should be contacted, when they can be contacted, and who can be included in the complaint process. Condition 5.0 of the Licence states the Director is to determine the distance from the operation for those who are to be provided contact information by Burnco.²⁹ It may be standard practice for the Director to leave this type of information vague in the approval or licence and then provide more certainty after the approval or licence is issued, however that does not provide area residents with any security that their concerns will be addressed. Clearly defined conditions within the Approvals and Licence would provide the Appellants with certainty that they are part of the complaint process. These residents would be provided with names and numbers of contact people for Burnco or its representative. Although the names and numbers should be readily available to all residents in the area, the distance should include, at minimum, the nearby residential subdivisions, including Westland Park 1 and 2 and Highland Acres, and individual landowners who own land within that distance. Therefore, the Board recommends the Approvals and Licence be varied to specify what distance from the pit residents must be located to be included in the complaint process; the minimum distance specified by the Director should include the nearby subdivisions.

²⁹ Condition 5.0(a) of the Licence provides:

“The Licensee shall provide to all water users, within a distance specified in writing by the Director from the pit(s), the contact name(s) and telephone numbers of the licensee or representative(s)....”

[94] The Appellants suggested the names and contact numbers be included in the Approvals and Licence. The Board recognizes this may not be overly effective as staff and positions change. Not including this information in the Approvals and Licence will allow more efficient methods to be developed to manage complaints as experience is garnered, and improved methods can be used without the need of an amendment. These residents should be provided with the names and numbers of contact people for Burnco or its representative, but the names do not have to be included as part of the Approvals and Licence.

[95] The complaint process included in Licence and Approval No. 00204375-00-00 only apply to water issues, and the Appellants suggested the process be expanded to include complaints regarding noise and dust. The Board considers this a reasonable request. Therefore, the Board recommends Approval No. 203803-00-00 be varied to include a complaint process that mirrors the one outlined in condition 5.0 of Licence No. 00203992-00-00.

[96] It is important for the Appellants to understand that their first course of action with a complaint should be to contact Burnco directly. Based on the submissions of Burnco and the statements by Mr. Burns at the hearing, the Board expects that any complaint brought to Burnco's attention will be investigated and responded to in a timely fashion. If the Appellants are not satisfied with the response of Burnco they should contact the Director and make a formal written complaint, pursuant to the conditions included in the Licence and Approval No. 00204375-00-00 and the condition that the Board is recommending be included in Approval No. 203820-00-00.

[97] The Appellants and Burnco discussed the Smithfield Community Advisory Group established to address the Burnco operation. The Board notes there have been concerns regarding the Advisory Group and suggests Burnco and other members of the community, including the Appellants, work to overcome the communication difficulties and ensure this community group can continue as a productive, helpful organization to all concerned. Testimony from Mr. Burns, owner of Burnco, demonstrates the willingness of Burnco to work with the community. The Board anticipates these efforts will continue and improve.

[98] Under the Approvals as issued, Burnco is not required to monitor PM_{2.5}, but, under the Performance Measures, it has agreed to monitor PM_{2.5} and PM₁₀. The Appellants

raised concerns regarding the health effects of TSPs. The data collected thus far do not include a full season of operation. The evidence suggests that dust and diesel emissions would have been highest during construction, but it was suggested by Burnco's consultant that continuation of TSPs and PM_{2.5} monitoring would be useful, particularly through summer 2008. This would provide data to assess whether predictions relating to airborne particulates were accurate, and may alleviate residents' concerns with air quality and related respiratory health. Therefore, the Board recommends Burnco monitor for TSPs and PM_{2.5} during the operational phase and Approval No. 203803-00-00 be varied to include this requirement. This is consistent with Burnco's undertaking to continue monitoring as part of its agreed upon Performance Measures.

[99] Approval No. 203803-00-00 requires Burnco to use water to control dust from the pit unless authorization is given by the Inspector to use alternate methods. Because the Appellants are concerned with the dust suppressant method used, the Board recommends the Director notify the Advisory Group or other community organization if other dust suppressant methods are considered. The Board recommends that condition 3.5.1 of Approval 203803-00-00 be clarified to indicate that the approval holder shall use "only water" rather than "any water" to control the dust from the pit.

[100] The Appellants raised a valid point on the use of averages in reporting collected data. If data are averaged over 24 hours, there are times during the day that the pit is not operating, thereby lowering the averages for noise or dust emissions. The same can occur with yearly averages, as there are times when the pit does not operate. By averaging the data, the information is skewed and does not truly reflect the conditions to which residents are exposed.

[101] Burnco's consultant testified that noise for the operation is on average about the same as the residential standard for Edmonton. The Appellants stated their neighbourhood is not "suburban" but better represented as a remote rural environment. The Burnco witness indicated the AEUB noise guide for remote areas is not achievable for the Burnco operation. Operators in rural areas must recognize the need to mitigate noise as much as possible, because residents in the area often live there to get away from urban noise levels. Given the growth of industrial development in rural areas, the Director should consider developing noise standards for rural residential areas. An important unresolved issue concerning noise is that averages are not useful to mitigate the perception of the impact for which the Appellants are concerned.

[102] Thus, the Board recommends that the Approval incorporate monitoring for noise for at least one year of continued operation; monitoring reports should include peak noise levels, not just averages; and more reporting on noise levels should be more frequent. This type of information would not only address residents' concerns, but also provide valuable information to Burnco and the Director to address and mitigate any possible impacts.

[103] Cumulative effects are caused by overlapping activities, such as additional pit operations, agricultural activities, or traffic from Highway 16. The term "cumulative effects" does not apply to different activities within the same operation, such as extraction and transport of gravel. Cumulative effect is an issue of concern in environmental management and is a priority to Alberta Environment. The Minister of Environment is developing a regulatory framework to enable sustainable development by addressing cumulative effects of development on the environment.

[104] The Approvals and Licence granted for this operation apply only to the pit operations on the NW 22-053-03-W5M and SE 16-53-03-W5M. Should Burnco expand its operation onto another quarter section of land, another application would have to be made to the Director. Whether the application is processed under the Code of Practice for Pits as a registration or as an approval under EPEA, will depend on the Director who retains the discretion to either accept an application as a registration or require an approval application. This discretion was retained in the legislation to be used by the Director when the situation warrants. A registration under EPEA may be issued instead of an approval, and a licence to divert water from the additional quarter sections of land may or may not be required.³⁰ If no additional

³⁰ Section 1(f) of Schedule 3 of the Water (Ministerial) Regulation, Alta. Reg. 205/98 provides:

“(f) a diversion of water for the purpose of dewatering a sand and gravel site or construction site if

- (i) the water diverted as a result of the dewatering is
 - (A) moved into and retained in an on-site pit, without using the water, or
 - (B) diverted back into a water body without using the water, if the water is equal to or of the same quality as the water that was originally diverted,
- (ii) the dewatering site, the water body and the on-site pit referred to in subclause (i) are hydraulically connected,
- (iii) there is no adverse effect on the aquatic environment or on a household user, licensee or traditional agriculture user, and
- (iv) in the case of a construction site,
 - (A) there is no adverse effect on any parcel of land, and

approvals or licences are required, it is possible for the next phase of development to proceed with minimal input from neighbouring residents. The Director and Burnco are aware of the contentiousness of the existing pit and subsequent pits. It is hoped Burnco will notify the public when the next pit is to be developed. Such an approach could be included as part of the community advisory group mandate to include local residents in discussions regarding future expansion of the Burnco operation.

[105] The Appellants were concerned with the potential impact of the Burnco operation on local groundwater wells and surface water. Licence No. 00203992-00-00 requires Burnco to investigate all written complaints accepted by the Director and to provide recommendations to remediate or mitigate the impact. In the Performance Measures, Burnco agreed to a number of measures if a nearby well user indicates to Burnco that they believe their water supply has been negatively impacted by the gravel operation, including providing a temporary alternative water supply within 24 hours if the resident is without water, hiring an outside consultant to determine the cause within 14 days, and providing a permanent alternative water supply if the problem is at least partially due to Burnco's operation. The Board considers these alternatives reasonable and notes most of these options have been recognized in condition 5.0 of the Licence.

[106] Pursuant to the Licence, Burnco must measure the amount of water diverted on a cumulative basis and record the amount on a monthly basis. Groundwater levels must be measured in monitoring wells on a weekly basis during the operational season, whether the season ends in October or November. Monthly measurements are required during the non-operational season. The Board considers this frequency of monitoring appropriate. The Director must approve the location of the monitoring wells, and Burnco stated it should have 13 wells operational as of the end of 2007. The Board believes it is appropriate for the Director to decide where the wells will be located based on his knowledge of the area, reports provided by Burnco and its consultants, and input from local residents, but a minimum of 13 wells should remain operational during the period of the Licence. Therefore, the Board recommends condition 4.0 be varied to require a minimum of 13 wells to be established as and when required by the Director.

(B) the maximum duration of the dewatering operation is 6 months or less for the entire construction project....”

[107] Approval No. 203803-00-00 also requires Burnco to prepare a groundwater monitoring program for the Director to approve. As part of this program, Burnco should continue with a minimum of 13 wells for the duration of the Approval to monitor groundwater quality and quantity.

[108] Approval No. 00204375-00-00 applies to the construction, operation, and maintenance of a pond in NW 22-53-03-W5M. The Appellants expressed concern that the increased standing water in the pond would promote mosquito populations and increase risk of the spread of West Nile virus. The pond is to be constructed for wildlife habitat purposes and is a benefit to the area. The conditions in the Approval protect the Bellhouse Water Management Project, and Burnco is required to investigate all written complaints accepted by the Director. Approval No. 00204375-00-00 applies to a specific part of the Burnco operation, and is unlikely to have a significant impact on area residents or the environment. The conditions of Approval No. 00204375-00-00 are appropriate, and the Board recommends Approval No. 00204375-00-00 be confirmed as issued.

2. Alternative Methods, Practices, and Locations for the Project

[109] The Board has reviewed the submissions of the Parties regarding alternative methods, practices, and locations for the project. The Appellants do not want the Burnco operation in their neighbourhood and suggested Burnco develop elsewhere. Burnco has to extract gravel where it is found. That is one part of the operation that cannot change. If the local municipal authority allows the development in the area, then Burnco can operate in the area once all required approvals, licences, and permits are obtained. This Board cannot comment on or change any decision of the local planning process including the subdivision and appeals board.

[110] The methods and practices as described in the Burnco application appear consistent with other gravel operations. At the Hearing, Burnco representatives explained how they intend to exceed industry practices, and the Board believes Burnco will take the necessary steps to be an exemplary business and neighbour.

[111] The community consultation organization needs to have structure, such that meeting minutes are taken and distributed. However, it should be flexible enough to allow

citizens to raise their concerns and have them discussed in a respectful manner, and to provide a forum for Burnco to discuss future plans. There was clearly mistrust by the Appellants towards Burnco. Although the Board is not aware of the reasons behind this mistrust, it is confident that, with time and open discussions, the Appellants and Burnco will be able to work together to minimize impacts to the community. The Board encourages the Approval Holders, and the Director to continue effective consultation with the Appellants and other people within the community affected by the Burnco operation and other gravel operations in the area. Burnco agreed to continue with the Smithfield Community Advisory Group or a reorganized community group. To gain trust within the community, it will be important that the group develops an agreed upon mandate and protocol for its meetings. The group should include members from Burnco, Alberta Environment, Parkland County, and the public, including some or all of the Appellants.

3. Baseline Data

[112] As part of its application, Burnco included expert reports on groundwater, air quality, traffic impact assessments, heavy metals, noise, dust, property impact, health, reclamation, economic, historical resources impact, and an environmental baseline study. Burnco and the Director argued Burnco provided more information and data than is normally required for a gravel pit operation. One of the reasons gravel pits now operate under a Code of Practice is because the effects of a gravel operation are well known, thereby reducing the amount of data that need to be submitted with an application. Burnco took great effort to study the area and the potential effects of its operation on the area. The Appellants argued an environmental impact assessment should have been completed. If an environmental impact assessment had been completed, the type of information required would not have been significantly different from what Burnco did on its own initiative. Although it would be preferable to have assessments completed at various times throughout the year, the Board accepts this is usually not practical.

4. Applicable Legislation, Policies, and Programs

[113] The Board believes the Director was aware of and did consider all of the applicable legislation, policies, and programs.

[114] The Board is concerned with the statement referred to by the Appellants that the Director does not refuse applications, and only considers what conditions should be included when the application is granted. Although the Director explained that anyone can submit an application and that he cannot refuse the submitted application, his statement portrays a situation where the Director does not critically review the application for completeness and accuracy of information. Although there is no indication in this case that the Director did not take the appropriate steps to review the application, the quoted statement may create a perception that the Director will always approve a project. The Board can assure the public that regardless of perception, the legislation allows a Director to refuse a licence or an approval for a variety of reasons. Likewise, following an appeal hearing, the Board can recommend to the Minister that a decision to issue a licence or approval be reversed.

5. Other Matters

[115] The Appellants and Intervenors were concerned with increased truck traffic on adjacent roads and the increased dangers for buses and commuters. As stated in the Board's decision on the issues for the Hearing,³¹ the matter of truck traffic and safety is not within the Board's jurisdiction. However, the Board suggests the Approval Holders work with Alberta Transportation and Safety to have the traffic controlled or monitored to ensure those who travel in the area are safe. Emphasis should be placed on controlling any affected school pick up/drop off zones currently or potentially affected by industrial traffic from the Burnco operation.

[116] During the Hearing, representatives for Burnco expressed concern with other industry companies and their practices. Burnco believed a number of companies are not complying with the requirements. Based on this information, the Board is concerned with the policy decision to implement a Code of Practice for gravel operations, particularly in that it excludes the requirement for public input into how the facility will be developed and operated. If people within the industry are concerned with what is happening, it should be a concern to Alberta Environment. EPEA provides the Director with the discretion to accept an application

³¹ See: Issues Decision: *Meredith et al. v. Director, Central Region, Regional Services, Alberta Environment*, re: *Burnco Rock Products Ltd. and Parkland County* (5 November 2007), Appeal Nos. 06-011-030, 032-034, 038-039, 042-049-ID1 (A.E.A.B.).

under the Code of Practice or require an approval. The Director needs to assess the application carefully, taking into consideration the location of the facility as well as other facilities in the area. The Board commends Burnco in this situation for continuing with the approval process when it had the option of reapplying under the Code of Practice. Burnco recognized the controversy over its application and responded appropriately.

[117] Burnco has made a number of commitments, which the Board expects it will honour, including its commitment to preserve the natural corridor and wetland on the west 300 metres of NE 16-53-03-W5M and SE 21-52-03-W5M and the Performance Measures.

[118] During the Hearing, Burnco repeatedly argued that the Appellants' issues were related to land use planning and they used the ability to appeal to this Board in an attempt to change a land use decision made by the local subdivision and development appeal board. The Director issued Approvals and a Licence in relation to the Burnco operation. Under EPEA and the *Water Act*, directly affected persons have the right to file an appeal to this Board. The Appellants filed Statements of Concern with the Director and submitted Notices of Appeal within the legislated time frames. The Appellants had valid environmental concerns regarding the Burnco operation beyond planning, including issues with dust, noise, and environmental monitoring conditions. The Board made it clear to the Parties that the issues before the Board must be in relation to the Director's decision, and not any decision made by the local subdivision and development appeal board. The Appellants were generally very specific in ensuring their arguments were related to the conditions included in the Approvals and Licence. The appeals were validly before this Board, and the Appellants had a right to appeal. In the Board's view, they did a commendable job in remaining focused on the issues to be considered within the Board's jurisdiction.

VI. RECOMMENDATIONS

[119] The Board recommends Approval Nos. 00022289-00-01 and 00022289-00-02 issued under the *Water Act* to Parkland County be confirmed as issued.

[120] The Board recommends Approval No. 00204375-00-00 issued to Burnco under the *Water Act* be confirmed as issued.

[121] The Board recommends condition 4.0 of Licence No. 00203992-00-00 issued to Burnco under the *Water Act* be varied to require a minimum of 13 wells be established as and when required by the Director. The Board recommends condition 5.0 of Licence No. 00203992-00-00 be varied to include, as specified by the Director, a distance that will include the nearby subdivisions of Westland Park 1 and 2 and Highland Acres.

[122] The Board recommends that the error that was made in condition 3.5.1 of Approval No. 203903-00-00 should be corrected. This condition addresses the requirement of dust suppression and indicates that “any water” should be used for dust suppression. The Board is of the view that the proper wording of this condition should be that “only water” should be used for dust suppression.

[123] The Board recommends Burnco monitor for TSPs and PM_{2.5} during the operational phase and that this requirement be included in Approval No. 203803-00-00 issued to Burnco under EPEA. The Board recommends that continuous monitoring for noise should be carried out for at least one year during operations and on a regular (i.e. non-continuous) basis after that for the term of the approval. Monitoring reports should indicate peak noise levels, not just averages. Therefore, continuous monitoring and more frequent reporting on noise levels should be incorporated into Approval No. 203803-00-00.

[124] The Board recommends Approval No. 203803-00-00 be varied to include a complaint investigation process that mirrors the process outlined in condition 5.0 of Licence No. 00203992-00-00, including the various recommendations made by the Board.

[125] Regarding sections 100(2) and 103 of EPEA, the Board recommends that copies of this Report and Recommendations, and of any decision by the Minister, be sent to the following:

1. Ms. Paula McGinnis;
2. Ms. Laura Peaire;
3. Ms. Jana Siminiuk;
4. Ms. Brenda Reddekopp;
5. Ms. Jean Morrison;

6. Mr. Mike Agostini;
7. Mr. Gordon Phillips;
8. Mr. Bill McDonald, Alberta Justice, on behalf of the Director;
9. Mr. Brian Rimmer, on behalf of Parkland County; and
10. Mr. David Brett, Gowling Lafleur Henderson LLP, on behalf of Burnco Rock Products Ltd.

VII. COSTS

[126] The Appellants reserved their right to apply for costs. The Board requests that any application for costs be provided to the Board within two weeks of the date of the Minister's Order with respect to this Report and Recommendations. The Board will then provide the Parties with an opportunity to respond to any such applications before making its decision.

Dated on January 14, 2008, at Edmonton, Alberta.

“original signed by”

Dr. M. Anne Naeth
Board Member and Panel Chair

“original signed by”

Dr. Alan J. Kennedy
Board Member

“original signed by”

Mr. Eric O. McAvity, Q.C.
Board Member



ALBERTA
ENVIRONMENT

*Office of the Minister
MLA, Medicine Hat*

Ministerial Order O/2008

Environmental Protection and Enhancement Act
R.S.A. 2000, c. E-12

Water Act
R.S.A. 2000, c. W-3

Order Respecting Environmental Appeals Board Appeal Nos. 06-014-030, 032-034, 042-049

I, Rob Renner, Minister of Environment, pursuant to section 100 of the *Environmental Protection and Enhancement Act*, make the order in the attached Appendix, being an Order Respecting Environmental Appeals Board Appeal Nos. 06-014-030, 032-034, 042-049.

Dated at the City of Edmonton, in the Province of Alberta, this 16th day of January 2008.



Rob Renner
Minister

Appendix

Order Respecting Environmental Appeals Board Appeal Nos. 06-014-030, 032-034, 042-049

With respect to the decision of the Director, Central Region, Regional Services, Alberta Environment (the "Director"), to issue *Water Act* Approval No. 00204375-00-00, *Water Act* Licence No. 00203992-00-00, and *Environmental Protection and Enhancement Act* Approval No. 203803-00-00 to Burnco Rock Products Ltd., and *Water Act* Amending Approval Nos. 00022289-00-01 and 00022289-00-02 to Parkland County, I, Rob Renner, Minister of Environment, order:

1. THAT the decision of the Director to issue Amending Approvals 00022289-00-01 and 00022289-00-02 to Parkland County is confirmed.
2. THAT the decision of the Director to issue Approval 00204375-00-00 to Burnco Rock Products Ltd. is confirmed.
3. THAT the decision of the Director to issue Licence No. 00203992-00-00 to Burnco Rock Products Ltd. is varied as follows:
 - a. Condition 4.0 is repealed and replaced with the following:

"4.0 The Licensee shall establish a minimum of 13 monitoring wells as and when required in writing by the Director."
 - b. Condition 5.0(a) is repealed and replaced with the following:

"(a) provide to all water users, including all of the residents of the Westland Park 1 and 2 and Highland Acres subdivisions and within a distance specified in writing by the Director from the pits(s), the contact name(s) and telephone numbers of the licensee or representative(s);"
4. THAT the decision of the Director to issue Approval No. 203803-00-00 to Burnco Rock Products Ltd. is varied as follows:
 - a. Condition 3.5.1 is amended by replacing the phrase "any water" with the phrase "only water".
 - b. Immediately after condition 5.5.5 the following is added:

“PART 6: MONITORING

- “6.0 The approval holder shall submit two copies of a proposed Air Quality Monitoring Program for the pit to the Director by March 31, 2008, unless authorized otherwise in writing by the Director.
- 6.1 The Air Quality Monitoring Program shall include, at a minimum, all of the following:
- (a) monitoring of total suspended particulates, including the location and frequency of the monitoring;
 - (b) monitoring of 2.5 micron particulate matter, including the location and frequency of the monitoring;
 - (c) a description of the information that will be included in an Annual Air Quality Monitoring Summary Report; and
 - (d) any other additional information specified by the Director in writing.
- 6.2 The approval holder shall implement the Air Quality Monitoring Program for the pit as authorized by the Director in writing.
- 6.3 The approval holder shall compile an Annual Air Quality Monitoring Program Summary Report including all of the information specified by the Director in writing.
- 6.4 The approval holder shall submit two copies of the Annual Air Quality Monitoring Program Summary Report to the Director on or before March 31 of the year following the year in which the information on which the report is based was collected, unless otherwise authorized in writing by the Director.
- 6.5 The approval holder shall submit two copies of a proposed Noise Monitoring Program for the pit to the Director by March 31, 2008, unless authorized otherwise in writing by the Director.
- 6.6 The Noise Monitoring Program shall include, at a minimum, all of the following:
- (a) the location and frequency of the monitoring;
 - (b) monitoring and reporting of both peak and average noise levels;
 - (c) continuous monitoring of noise from the pit for a one year period during operations;
 - (d) a description of the information that will be included in a Quarterly Noise Data Report;
 - (d) a description of the information that will be included in an Annual Noise Monitoring Summary Report; and

- (e) any other additional information specified by the Director in writing.
- 6.7 The approval holder shall implement the Noise Monitoring Program for the pit as authorized by the Director in writing.
- 6.8 The approval holder shall compile a Quarterly Noise Data Report and an Annual Noise Monitoring Program Summary Report including all of the information specified by the Director in writing.
- 6.9 The approval holder shall submit two copies of a Quarterly Noise Data Report to the Director covering the previous 90 days within 7 days of the end of that 90 day period, unless otherwise authorized in writing by the Director.
- 6.10 The approval holder shall submit two copies of an Annual Noise Monitoring Program Report to the Director on or before March 31 of the year following the year in which the information on which the report is based was collected, unless otherwise authorized in writing by the Director.

PART 7: COMPLAINT INVESTIGATION

- 7.0 The approval holder shall:
 - (a) provide to all residents, including all of the residents of the Westland Park 1 and 2 and Highland Acres subdivisions and within a distance specified in writing by the Director from the pits(s), the contact name(s) and telephone numbers of the approval holder or representatives(s);
 - (b) investigate all written complaints accepted by the Director relating to the activities carried out pursuant to this approval; and
 - (c) provide a written report to the Director, within a time specified in writing by the Director, detailing the results of the investigation relating to the complaint accepted by the Director in 7.0(b) including:
 - (i) recommendations to remediate and/or mitigate the impact(s) that are identified in the investigation; and
 - (ii) any other information required by the Director.
- 7.1 The approval holder shall satisfy the Director that the report submitted pursuant to 7.0 has identified remedial and/or mitigative measures relating to the activities carried out pursuant to this approval.”