

Birchwood Community Council

19213 Sprucecrest Drive

Chugiak, Alaska 99567

Position Paper - Case 2007-093, September 8, 2008

History

The Birchwood Community Council and area neighborhoods initially were informed of the NW ¼ Section 25 gravel extraction project in an informational meeting organized by the applicant in March 2007. During the meeting the applicant gave a brief presentation about the agreement signed by the State and the Municipality of Alaska (Section 25 Materials Extraction Agreement), the gravel extraction project and answered questions. Among the main issues of concern to the residents in the Birchwood Community Council area were the proposed hours of operation, potential noise and air quality impacts, traffic safety issues and water quality issues mainly related to the drinking water wells. At this meeting the applicant, through the contractor HDL solicited information about well logs and historical water flow and aquifer studies, as they confessed not to have investigated any potential water related impacts.

Contrary to the repeated statements by the applicant to want to work with the community, information was not freely exchanged and it appears the process is being purposefully manipulated by an agreement timeline, which does not allow for an objective scientific approach to the issues raised by the public and experts, resident in the Birchwood Community Council. No response was given to a Birchwood Community Council motion addressing the community's concerns. A letter drafted and signed by over 30 residents to the applicant in January 2008 was only responded to after a 'Freedom of Information Act' (FOIA) review of the documentation regarding the extraction project was requested. It took the applicant 5 months to respond without even addressing one of the key issues, the lack of an open and integer communication with the public.

During the whole application process, which has now taken over a year, the applicant has pressured both, the Planning and Zoning Commission as well as the public, to adhere to an artificial timeline created by the applicant and the Municipality of Anchorage, through the Extraction Agreement. This artificial timeline, in effect, tries to circumvent the public process by cutting short or completely eliminating a scientific approach to the concerns raised by the extraction project. The threat to revert to a "Free Use Permit" if a CUP is not granted under the conditions sought by the applicants is perceived as an intentional manipulation of the democratic process and borders on blackmail. In other words, if we do not agree to the lesser evil now with the proposed CUP, we will have no input if the applicant reverts to the 'Free Use Permit'. This political strong arming has diminished the public trust in an already flawed process.

The Municipality of Anchorage had determined that prior to dedicating the land as parkland for inclusion in the Beach Lake Master Plan, the land status needed to be decided. With this vested interest in a speedy CUP, the Municipality cannot be seen as an independent party in the CUP application process. The neighborhood and the public in general are the losers in this process, especially when decisions are made without proper scientific investigation and justification. Because of the lack of independence between the applicant and the permit granting Municipality, the burden is placed on the public and the community in specific to act as peer reviewer without the proper process and insufficient access to the information. We strongly urge the Commission to act as independent, objective voice for the public and to initiate an unbiased, third party review of the application, supporting studies and documentation and to include the Birchwood Community Council and the public in the process.

Below is a summary of the Birchwood Community responses to the staff recommendations.

Hours of Operation

At the informational meeting in spring 2007, the applicant assured the audience that the hours of operation would not exceed 7 AM to 6 PM Monday through Friday and 8 AM to 5 PM on Saturdays, with no operations on Sundays and Holidays. It was to everyone's surprise when at the first Planning and Zoning Commission hearing on July 9, 2007 the applicant requested extended hours of operation from 6 AM to 10 PM daily with periodic extensions of 24 hours 7 days a week for special projects. Only a number of residents were present at the meeting, but they were outraged at the last minute change in the CUP Application. In the staff memo and recommendations it is acknowledged that "Gravel pits are not generally compatible with residential areas "(Planning Department 9/8/2008 summary memo, page 6) nevertheless an extension of the standard the hours of operation within a residential area are recommended solely because the project is classified as only temporary in nature. This refers both to the whole gravel extraction project and the request for periodic 24/7 operations.

The hours of operation exceed the limit for typical gravel extraction projects. For this meeting there already is a request before the Commission to allow the amended hours of operation to 10 PM for other gravel extraction areas (case 2008-117). The rationale for the statements in the staff memo on page 3 "The Planning Department believes, that as conditioned, the occasional, extended hours of operation can be permittedThis in no way should be construed as a precedent in establishing extended hours of operation for other gravel pits." is hard to follow. Other gravel extraction projects could use the same argument of speeding up projects in the local area. There is no obvious difference between a state operated gravel extraction site and a privately owned one.

The applicant requests a 10 year duration period for extraction in Section 25. In our mind a decade cannot be considered temporary. Furthermore, the application insufficiently specifies how often and for how long exclusions for a 24 hour operation are to be granted. References on page 18 of the staff recommendations to "project demand basis" and "Limited operations, when necessary, will be permitted on a 24 hour basis, for as limited a duration as paving of the project

demands” could not be more vague. Without a quantitative limit on the exemption, there is no recourse for a community, which is already inundated with noise, dust and traffic issues, especially close to Powder Ridge Subdivision. Even with restriction on allowable activities during the extended hours, a significant impact will be felt along the road corridor and the southeastern boundary of the gravel extraction area. A more detailed discussion of the air quality and noise impacts follows below.

We recommend to permit the applicant to operate only during the hours previously granted to other extraction sites within the area, i.e. limit the hours of operation to 7AM to 6 PM Mondays through Saturdays for all pit operations.

Air Quality

On page 3 in the staff memo, the Planning staff states that a detailed air quality plan is required and was submitted. We disagree with this statement. The dust control plan submitted for the September meeting is written vaguely and does not address a number of the resident’s concerns. The plan states that “The contractor has the authority to use water trucks at his discretion”, but does not specify when, under what conditions and what actions need to be taken. No discussion of controls during “off-hours” is included. This area often experiences high winds and disturbed soils and gravels are easily entrained into the air. The applicant offers to provide a telephone number for complaints and submit 2 reports per year to the Municipality. Again, the plan does not spell out what actions need to be taken once a complaint is received other than that it needs to be reported. The plan does not leave the public any recourse other than the complaint process which should not be the sole mechanism of controlling a permit or permit conditions. Steve Morris, the air quality manager for the Municipality, acknowledged in a discussion of the dust control plan that most actions were implied, rather than spelled out. He believed that the applicant understood the implications. Unfortunately the community does not share this trust.

We suggest a more detailed and specific dust control plan be required before a CUP is granted, to include clear and objective conditions to allow assessment of compliance by the public, the community councils, the municipality staff and other interested parties. Limit active gravel removal to a total of 5 acres at any one time to minimize the amount of surface area exposed and susceptible to erosion and windblown dust generation (see Best Management Practices for Quarry and Sand Pits, Regional Municipality of Waterloo- Water Service Division, Appendix A1)

Noise Impact

Although the Planning Department acknowledges potential noise impact in residential areas close to the pit and transport route in the staff memo and recommendation, the mitigation strategies suggested do not target the main source. As mentioned in the staff memo, a noise study was conducted in May 2008, but the report is not included in the supporting documentation. Even though a copy of the report was requested, only some data sheets are made available through the staff notes. A detailed discussion of methodology, results, interpretation and conclusions is therefore not possible. Through the ‘Freedom of Information Act’ request for documents and correspondence regarding the gravel extraction site in the applicant’s files, several documents were found supporting the neighborhood complaints about significant noise impact mainly due to truck traffic. In an email from J. Ruehle (DOT&PF) to R. Feller

(DOT&PF) on May 14, 2008 (see appendix B1) some noise measuring results were discussed. The noise specialist assumed 20 trucks per hour along Eklutna Drive at an average speed of 30 mph and predicted the noise level to be above 69dBA, which exceeds the municipality's daytime limit by a factor of 8. He estimates further that a reduction both in speed to 20 mph and in number of trucks to 10 an hour would bring the noise level to below 60 dBA, which would satisfy daytime limits, but still would exceed the nighttime limits of 50dBA.

A more detailed discussion of the 'Section 25 Gravel Pit Noise' is attached in Appendix B2. This document was part of the DOT&PF files made available to the public during the FOIA request. Unfortunately, the 'report' did not have a cover page, so authorship and date of origin are not available.

In this report the noise impact is divided into two categories, affecting homes along Hillcrest, Pioneer and Almdale Roads and affecting Powder Ridge Subdivision. While the report states that for the most part night time operations in the pit will not exceed noise level requirements for the night time, it does mention equipment noise which could be as loud as 68dBA. (An increase of 3 dBA equates to a doubling of the noise, i.e. if the night time limit is set to 50 dBA, an increase of 18 dBA means that the noise is 64 times louder than the limit). The measurements were taken in mid-May when leaves are helping to attenuate sound. Especially at night when the air is cooler and sound travels further, night time activities may show even more impact. As the report does not discuss the frequency and extent of this intermittent noise, it is hard to convince the public that it is acceptable nighttime background noise. For the Powder Ridge Subdivision on the other hand, the report clearly states that to meet night levels, the number of trucks would have to be limited to 5 trucks per hour. (Appendix B2, page 2, paragraph 2)

We recommend limiting hauling to 10 trucks per hour during the day time with a speed limit of 20 mph and not to permit any night time operations.

Traffic Issues

The Planning Department 9/8/2008 memorandum and recommendations do not adequately address the serious traffic issues that will occur along Eklutna Drive North impacting the residents of Powder Ridge Subdivision. Already, the community is impacted by the truck traffic from the existing Eklutna Inc. owned gravel pit, both in terms of traffic and noise. At a Planning and Zoning Commission hearing (case 2007-040, application approved February 2007) for the Eklutna Inc. Gravel Extraction CUP application residents voiced their concerns about traffic and noise impacts. In condition 16 of the CUP the applicant is required to provide a transportation operations management plan to the Planning Department and Traffic Department staff. "No parking, idling, and no Jake braking (engine compression braking) operations are allowed on Eklutna Parkway..." The applicant, Eklutna Inc., gave their assurance that the residents would have recourse by calling appropriate officials. During informational walks through the Powder Ridge Subdivision, we heard numerous complaints from residents objecting to trucks exceeding the speed limit, using Jake brakes and idling outside homes at 6am. Residents have called the police, the municipality and Eklutna Inc., but the problem persists.

Additionally, the intersections along Eklutna Drive North include the off and on ramps to and from the Glenn Highway. Truck drivers, who are often paid by the load, have been observed on numerous occasions to become impatient while waiting to exit the highway onto Eklutna Drive

North to access the gravel pit. Trucks have been frequently observed pulling out into traffic even though they may slow or stop traffic driving across the overpass into and out of Eagle River. With increased traffic from the Section 25 gravel extraction, waiting lines might grow longer and this frequent behavior will likely increase the risk of accidents.

We request that the additional truck traffic be limited to the numbers and hours stated already above: 10 trucks per hour during the day time with a speed limit of 20 mph. We additionally request that the Commissioners should request a traffic study be conducted and reported prior to CUP approval. The management objective resulting from the study is to investigate mitigation strategies for the increased truck traffic and safety concerns of all who live in the neighborhoods, and the many commuters using the Eagle River North overpass on a daily basis, both currently and increasingly in the future.

Discussion of Excavation Bottom to Water Table Separation Distance

A two foot separation distance between excavation pit bottom and the seasonal high water table is not technically supported nor scientifically justified. The decision is administratively driven and disregards independent and unbiased comments and review by subject matter experts within the MOA, outside agencies and professionals. In this particular case, both the DOT&PF and the MOA are interested parties in the approval of a conditional use permit.

In the discussions and final approval of the joint extraction agreement between the MOA and DOT&PF, the MOA was not represented by technical experts (source: Anna Fairclough, a former assembly chair who was directly involved in negotiations, responding to questions at the Birchwood Community Council meeting, 9/26/2007). A two foot separation distance was agreed upon based on the amount of recoverable high quality gravel that could be extracted in a cost effective manner. Based primarily on the 1966 borehole data in the DOT&PF Engineering Geology and Soils Report, an expanded footprint of the proposed excavation would not be cost effective due to lower quality gravel along the outer margins.

The DOT&PF and the MOA have failed to locate a scientific rationale or best management practice that establishes a two foot separation distance. Instead the separation distance appears to be based on financial reasons. Jim Munter, a hydrogeologist consultant hired by the applicant, wrote in internally distributed notes that “Additional research regarding the ‘sound science’ behind the 2-ft buffer may be warranted....This has come up in a lot of other jurisdictions in Alaska and around the US” (see Appendix C1: Jim Munter’s notes, “Checklist of open items for Response to Comments,” number 17.). The MOA Planning Department makes a controversial statement that “a two foot separation allows time for filtration of rain, snowmelt, runoff from other properties, and potential fuel or oil leaks from the equipment” (Planning Department 9/8/2008 summary memo, pg. 5.). This assumption is based on a position by Mr. Munter. After documentation review and a conversation with Mr. Munter, an MOA Watershed Specialist, Scott Wheaton, stated that Mr. Munter “offers no substantive evidence that the site he references is sufficiently similar to this [Sec. 25] site for use in a valid comparison and no evidence that such rapid response is not due solely or predominantly to trapped air compressed beneath the recharge pulse.” The MOA Watershed Management Services (WMS) calculations “suggest that infiltration times under undeveloped conditions are more prolonged, on the order of days to

several weeks, particularly for critical fall rains when recharge occurs as pulses.” (Appendix C4: Birchwood Pit Revised Preliminary Watercourses Mapping, 2/19/2008, Page 5.)

There is a scientifically justifiable separation distance of 4 feet. The four foot separation between the bottom of an excavation and the seasonal high water table is based on the estimated percolation time for a 1 inch rain event. Four feet is determined to be the minimum thickness required to retard a contaminant release that reaches the bottom of the excavation and maximize the natural attenuation of the contaminant before it reaches groundwater.

The MOA WMS also performed calculations using conservative 2-layer surface impoundment methods (e.g., see McWhorter D.B. and Nelson, J.D., 1978, Journal of Geotechnical Division, ASCE) and concluded infiltration rates were significantly slower with an increase in separation distance (Appendix C4: Birchwood Pit Revised Preliminary Watercourses Mapping, 2/19/2008, Page 5.).

There have been several expert opinions expressed on the recommended separation distances that are specific to this case. The applicant’s hydrogeologist consultant, Mr. Munter, has stated that a two foot separation distance is adequate and the Planning Department has stated, “The gravelly nature of the soil indicates that increasing the separation to four feet will not provide significantly more filtration than the two foot separation” (Planning Department 9/8/2008 summary memo, pg. 5.). Two independent calculations contradict the Planning Department’s infiltration assumption and Mr. Munter is professionally alone in his opinion. In fact, Mr. Munter has acknowledged that the water table should be expected to reach the surface of the pit or reclaimed land surface during the spring and fall (Appendix C1: Jim Munter’s notes, “Checklist of open items for Response to Comments,” number 11; also Letter to Dennis Linnell from Jim Munter, 8/22/2007).

The MOA, Department of Health and Human Services, On-Site Water and Wastewater recommended a greater separation distance than two feet in an email inquiry by the Planning Dept on this case (See Appendix C2). Specifically there was a recommendation of a four foot separation distance based on experience in seeing problems encountered with water contamination. In addition, there was concern that a two foot vertical separation distance could not be maintained by excavation equipment. Given their familiarity with heavy equipment, staff believed there is an increased risk that the water table would be inadvertently encountered. Further, a resident in the Sec. 25 area, who has many years professional experience in the gravel extraction and road construction field, has commented that there is a very high likelihood that excavation operations will penetrate the water table if a two foot separation distance is maintained.

Beside MOA On-Site Water and Wastewater, the MOA WMS Division has also stated that “Considering the flux of shallow groundwater concentrated along the outwash floodplain and the transmissivity of the sediments comprising it, a 2-foot vertical separation ...is not likely to adequately protect existing hydrologic systems, including Fire Creek.” The WMS went on to recommend a separation distance that “should not be less than 4 feet” (Appendix C3: Birchwood Pit Preliminary Watercourses Mapping, 1/11/2008, Page 4). The minimum separation distance was slightly revised by WMS to no less than 42 inches in a follow up memo (Appendix C4: Birchwood Pit Revised Preliminary Watercourses Mapping, 2/19/2008, Page 5).

Two professionals residing nearby the Sec 25 area have also reviewed the geology and hydrology data for the Birchwood Community Council. Elizabeth Shen, a hydrogeologist, and Alan Peck, a hydrologist, independently agreed that the two foot separation distance was inadequate. Mrs. Shen recommended a four foot minimum separation and Mr. Peck recommended a four to six foot separation distance for this project. These recommendations are derived from a need to be more conservative when there is a paucity of data on seasonal and historical water levels and insufficient ground water aquifer mapping. Minimizing the risk to the aquifer can be accomplished either by having a better handle on the science or by being more conservative.

The Department of Environmental Conservation, Drinking Water Protection Program also commented on the separation distance (Appendix C5: letter dated Sept. 7, 2007 to Al Barrett, Senior Planner, Planning Department). It was recommended to “maintain a vertical separation distance between the maximum water table level of the upper unconfined aquifer and proposed excavation activities of a minimum of 5 feet. This is greater than the 2-foot vertical separation distance that is currently proposed. However, is consistent with that used in other areas.”

Neighboring boroughs to the Municipality of Anchorage address the vertical separation distance through ordinances. The Matanuska-Susitna Borough passed ordinance 08-017 on April 17, 2008 (see Appendix C6). The ordinance requires a four-foot separation between the bottom of a gravel pit and the top of the seasonal high water table. The Borough Planning Department and administration recommended that the assembly adopt the ordinance and they agreed. The ordinance was initially passed for a six month period. In conversation with Borough Planning Department staff and an assembly member in June 2008, there is expectation to make the ordinance permanent without modification in October 2008.

The Kenai Peninsula Borough ordinance 2006-01 substitutes Chapter 21.26 with Chapter 21.29 and was passed to address the regulation in material extraction sites that stemmed from resident and commercial conflicts in the Anchor Point area. The ordinance reads “all counter permits shall be issued with a condition which requires that a four-foot vertical separation from the seasonal high water table is maintained.” An exception to the separation distance is made for conditional use permits that are subject to scrutiny through the public hearing requirements and are approved by the planning commission. This ordinance exception does not set a standard or establish a best management practice, but allows an opportunity to review a project on an individual basis that allows for technical review.

Site Contamination Risk

Removing contaminants from ground water is difficult and much more expensive than preventing contamination in the first place. Corrective action will likely require following a legal path, supported by technical consultants. Such costs will be borne by the MOA and are likely to be high. Another challenge is that there could also be great differences of opinion between DOT&PF’s contactor/operator, MOA, and other affected parties on what constitutes a suitable or acceptable replacement or repair of the damaged water resource. Sand and gravel aquifers are highly permeable since water moves rapidly both vertically and horizontally and these aquifers are extremely susceptible to contamination. Activities within an extraction site which may

introduce potential risks to water include asphalt batch plants, on-site storage of fuel, staging areas, stormwater collection and infiltration areas, wash plant, and rock crushers which use water that may wash pollutants into the groundwater. With a two foot vertical separation, there is an elevated risk that surface contaminants will migrate into the groundwater. Scott Wheaton, Watershed Specialist, detailed contaminate concerns in the January 11, 2008 WMS “Birchwood Pit Preliminary Watercourses Mapping” document (Appendix C3: Conclusion and Recommendation number 3, page 4). He wrote that,

“Potential for contamination of the shallow ground water system will be further exacerbated by proposed development activities – gravel extraction and processing. These activities will certainly include trafficking of the pit surface by heavy equipment and support vehicles, and most likely the screening, crushing, and washing of raw pit materials. Fugitive leaks, spills and process waters and wastes will be subject to leaching and mobilization with precipitation and runoff. Rate and degree of mobilization of these wastes into shallow ground water system will be increased by a too-thin gravel cover.”

Mr. Munter, consultant hydrogeologist, also recognized that contaminants were an issue when he addressed specific concern with batch plant operations (Appendix C1: Jim Munter’s notes, “Checklist of open items for Response to Comments,” number 14).

Risk can be reduced somewhat through preventive measures, however the potential remains from normal operations that contaminants will enter the shallow ground water system, reemerge as surface water along the railroad ditch and accelerate toward Fire Creek located 500 ft from the excavation area boundary.

Proper reclamation is critical in maintaining aquifer quality after gravel extraction operations end and land is converted to other uses. Mr. Wheaton raised concerns related to restoration, development, and maintenance for other land uses, including playing field or park applications (Appendix C4: Birchwood Pit Revised Preliminary Watercourses Mapping, 2/19/2008, Page 5-6). Among his points on this topic, he stated, “A too-shallow post-development ground water table...represents a significantly increased sensitivity to water quality impact and increased costs or reduced opportunities for post-excitation landuse restoration and use.” Mr. Munter also commented that “the aquifer will be somewhat more vulnerable to contamination from potential sources of contamination associated with future land uses” (Letter to Dennis Linnell, 5/7/2008, page 3).

Restoration and landscaping is not consistent with the final use of property as park since the Beach Lake Master Plan has not been updated to consider possible uses. The proposed CUP will limit options available to Beach Lake Park through reclamation that pre-determine possible land use. Even in the most passive state as a grassed playing field, fertilizers, herbicides, pesticides, and unintended miscellaneous spills such as hydrocarbons, could contaminate the water resource and migrate into Fire Creek. Generalized comparisons to other play fields in Anchorage concerning the topic of water quality degradation should be carefully evaluated and restricted, due to the specific physical factors of this site and a lack of hydrogeologic data for this site and

other municipal playfields. It is not unreasonable to expect a more detailed reclamation plan and post pit water monitoring that will occur over several years after excavation ends.

The MOA Conditional Use Standard B.4 has not been met. This standard requires a finding that “The restoration plan for the site assures that after extraction operations cease, the site will be left in a safe, stable and aesthetically acceptable condition.”

Groundwater Flow

An aquifer test is commonly used to map a confined aquifer. The test is conducted by pumping water from one well at a steady rate and for at least one day, while carefully measuring the water levels in the monitoring wells. When water is pumped from the pumping well, the pressure in the aquifer that feeds that well declines. An aquifer test has not been performed near the proposed Sec 25 excavation site.

Conclusions in Jim Munter’s hydrogeologic assessment were drawn from meager data resources and some available relevant data were not used. The community has knowledge of publicly available well data near the Sec. 25 area that was not used in the hydrogeologic report. Mr. Munter commented on the lack of data (Appendix C1: Jim Munter’s notes, “Checklist of open items for Response to Comments,” number 8). He said,

“Recommend HDL recheck whether MOA on-site records were searched for well logs. This is a time-consuming lot-by-lot search. If any are found, we could probably just enter them into the record, evaluate them, and say that they were evaluated and do not change the prior assessment. My May 7 report was vague on this topic and it should be clarified (my fuzzy recollection is that only WELTS was searched, and that is why I left it vague, but I could be wrong).”

Mr. Munter and the applicant earlier recognized that less than adequate resources were available in which to make conclusions (“We concur, the data is sparse...” Letter to Dennis Linnell from Jim Munter, 8/22/2007).

The MOA Conditional Use Standard B.2 has not been met. Given scarce ground water data available, insufficient aquifer mapping, and a recognized likelihood of encountering the water table, there is a finding of unacceptable risk of hazard to public health, safety, and welfare and therefore is not in the public interest and should not be allowed. The following example illustrates one scenario of unintended changes to ground water flow dynamics resulting from the extraction process in a perched alluvial aquifer.

The known “abandoned channel aquifer” of concern and risk in the excavation area (Section 25) is the unconfined water within the alluvium substrate. Scott Wheaton concluded that the shallow ground water of the aquifer is perched upon underlying, less permeable tills (Appendix C3: Birchwood Pit Preliminary Watercourses Mapping, 1/11/2008, Conclusions and Recommendation, page 3).

An Alaska Department of Natural Resources report addressed a groundwater disturbance of a shallow perched alluvial aquifer (See Appendix C7: Technical Review of the September 1999

Groundwater Disturbance Near Ester, Alaska. Jim Vohden. DNR/DMLW, 13 March 2000). The report reviewed the affects on the aquifer when the water table was penetrated by material excavation down gradient of private drinking water wells in a nearby residential subdivision. There were sharp declines in water levels and degradation of water quality in upgradient domestic wells following the interception of groundwater. The excavation pit filled due to a flow rate of 500 gallons per minute and has permanently exposed the aquifer to quality related risk. In this instance, the case went to court. The company, Yellow Eagle, went bankrupt, government agencies were left to mitigate the aquifer damage at public expense, and private well owners were left to deepen wells, install holding water tanks, or haul water at their expense.

Water Protection for Private Wells

The various programs in the Alaska Department of Environmental Conservation (DEC) dealing with water related issues do not have jurisdiction over private water wells. However, the DEC Division of Environmental Health has responded with comments regarding this project. The only protection for private water wells is through a process of granting water rights by the Alaska Department of Natural Resources (DNR). A public request for the DOT&PF to identify water rights within and to 0.5 mile outside the aquifer boundaries underlying the proposed excavation site was made to the P&Z Commission at the July 16, 2007 hearing. In a letter dated August 22, 2007 to Mr. Dennis Linnell, Jim Munter responded to this request by writing, "Water rights do not need to be specifically identified.... As a protective measure, all wells are protected by a public interest water rights doctrine that has been invoked in the past in urban areas by the Alaska Department of Natural Resources." A legal specialist in federal and Alaska water rights, Warren Keogh was contacted to confirm Mr. Munter's statement. Mr. Keogh was unaware of any such blanket protections or legal doctrine. Also contacted was Gary Prokosch, Chief of the DNR Water Resources Program which grants and manages all state surface and ground water rights. Mr. Prokosch said that a "public interest water rights doctrine" does not exist in Alaska and that the only legal protection of ground water use from a private well is by the granting of a water right through the DNR Water Resources Program. Thus there are no federal, state, or local agencies that will provide protections to a ground water source used by a private well owner. The recourse for that private well owner is to take on the burden of proof to show damages and follow an expensive legal course against a defendant that is usually better financed.

Water Related Recommendations

To minimize risk to the aquifer below the gravel extraction area, the Birchwood Community Council recommends that the Commission require a minimum separation distance between the seasonal high water table and the gravel pit bottom to be no less than 4 feet. In addition, more detailed aquifer mapping and data collection of seasonal and historical water levels should be conducted and a third party should be involved in the review of the data to ensure an unbiased, independent review.

Additional Development in the Area

The surface waters of Fire Creek and area drainage ways, along with groundwater aquifers and subsurface flows, are not well understood. Cumulative development projects are occurring in the Fire Creek drainage, which on the west side of the Glenn Highway include: the Eklutna Inc. gravel operations to the south side of the Fire Creek watershed, the proposed Section 25 natural

resource extraction on the north side of the watershed, and the 404 acre residential subdivision to be developed by Eklutna Inc. on the north side of the watershed. There are private wells on the northern side of the watershed and at Fire Lake, in addition to high density housing to the west side of the Glenn Highway and the south side of Fire Creek. The lower watershed is within Beach Lake Park where ground water enters the wetlands and supplies Fire Creek. The Municipality is making case by case decisions, where a comprehensive management concept is needed. The ground and surface hydrology needs to be well understood, especially in light of current and future use and development.

Final Thought

“The DOT&PF and MOA exist to serve the public.” (Bruce Botelho, Alaska Attorney General, Letter dated 10/15/2001). The public evidence indicates that in Case 2007-093, the two agencies charged to serve the public’s best interest have failed to do so.

Bobbi Wells, Chair

Birchwood Community Council

APPENDICES:

Some of the following appendices are already contained in the commission’s documentation packet, and are attached again for ease of reading. On the other hand, not all reference material is attached to reduce bulk, but can be found in the documentation packet.

A1: Best Management Practices for Quarry and Sand Pits, Regional Municipality of Waterloo-Water Service Division

B1: Email from J. Ruehle (DOT) to R. Feller (DOT) on May 14, 2008

B2: SECTION 25 GRAVEL PIT NOISE, document from DOT files

C1: Jim Munter’s notes, “Checklist of open items for Response to Comments,”

C2: MOA On-Site Water and Wastewater Conversation Record

C3: WMS Birchwood Pit Preliminary Watercourses Mapping, 1/11/2008

C4: WMS Birchwood Pit Revised Preliminary Watercourses Mapping, 2/19/2008

C5: DEC Drinking Water Protection Program letter dated Sept. 7, 2007

C6: Matanuska-Susitna Borough passed ordinance 08-017

C7: Groundwater Disturbance Near Ester, Alaska.

C8: May 2008 aerial photo of Ester neighborhood and down gradient pit