Comment Disposition

Comments On: Southwestern Landfill Draft EA – March 2, 2020

Received From: JMCC Peer Review Team

Comments Received: May 20, 2020
Responses Provided: June 1, 2020

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Landfill Design and Operations (Vol 1, Section 7.2+)		1. The use of a 'permeable' final cover is proposed. What is the proposed design (soil type, etc.) and hydraulic conductivity of the final cover?	The final cover design is outlined in Section 7.2.1.8 of the Draft EA Report. It is noted that the soils will be native overburden from the quarry stripping, or imported materials if necessary. The hydraulic conductivity will be sufficient to permit a minimum infiltration rate of 0.15 m/year as required under O. Reg. 232/98 for the generic liner system. Design specifications and construction details will be prepared in conjunction with the EPA Part V approval.
Landfill Design and Operations (Vol 1, Section 7.2+)		2. What is the planned Contaminating Lifespan (CLS) of the landfill based on the proposed infiltration rates?	The CLS is factored into the design requirements for the *Generic Design Option II – Double Liner* as set out in O. Reg. 232/98. Since Walker is adopting the Ministry's design, it is not required to separately (re)assess the CLS as part of this application (see *O. Reg 232/98*, Section 6(2)(c)(xix)). In Section 4.5.2 of the Landfill Standards (p.38) : "*… for a site utilizing the single or double composite generic design, the contaminating life span for leachate impact on groundwater (based on the minimum infiltration rate of 0.15 metres per year) is 160 years and 360 years, respectively*."

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Landfill Design and Operations (Vol 1, Section 7.2+)		3. Please confirm which drainage layer of the liner will be initially used for groundwater control to maintain the groundwater pressure at 260± masl?	The performance of the *Generic Design Option II – Double Liner* as set out in O. Reg. 232/98 does not depend on control of the external groundwater levels. As such, Walker only needs to control groundwater levels (using the existing quarry dewatering system, as required) in order to allow for suitable backfilling and liner construction conditions, as described in Section 7.2.1.6 of the Draft EA Report. However, we infer from the reviewer's mention of 260 masl that they are considering the implementation of the liner system in the context of the groundwater model as opposed to the generic design. The following is stated in Section 10.5.1.2 in Golder, May 2019: *The FCA design shows a liner system underlying the waste with an alternating "primary" and "secondary" system of leachate collection pipe drains in clear stone, thin HDPE liner, composite clay liner, and thereafter an attenuation layer. For the purpose of the 3D flow modelling within the regional scale model, this multi-unit system is combined and simplified into the following key hydraulic components: A single 0.3 m drainage layer with an assumed hydraulic conductivity of Kh = Kv = 1 x 1$^{'2}$ m/s (**in effect the primary drainage collection system**). The drainage layer is assigned drain cell elevations corresponding to the top of the drainage layer. These drain cells can only remove, not provide, water to the system.* The above modelled primary drainage layer results in the **simulated** groundwater elevation of +/- 260 masl, which is

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			approximately the assumed base of the waste. However, as further stated in Golder, May 2019: *In reality, the practical imperviousness of the liner system may result in the hydraulic system within the landfill being "perched", or hydraulically disconnected from the surrounding groundwater system. However, the assumption of hydraulic connection is conservative from the effects assessment perspective.*
Landfill Design and Operations (Vol 1, Section 7.2+)		4. Will the target groundwater pressure be maintained beneath the base of the landfill liner over the CLS of the site?	See #3 above; there is no target groundwater level (pressure) associated with the acceptable performance of the liner system over the full contaminating lifespan of the landfill, as set out in O. Reg 232/98 and the *Landfill Standards*.
Landfill Design and Operations (Vol 1, Section 7.2+)		5. Based on the anticipated operations for the proposed landfill and experience at Walker's South Landfill, please provide the expected/assumed timeline over the CLS for: i) quarry dewatering (Southwest Quarry, movement of quarry operations to the northeast, and deactivation of dewatering/rehabilitation), ii) dewatering during landfill construction, iii) groundwater removal from the landfill liner drainage system(s), and iv) the anticipated quarry/landfill overlap of the water removal processes?	The quarry operator has several hundred years of limestone reserves and resources, and it is assumed that quarrying, and therefore dewatering, on this property will continue throughout this period. It is estimated that quarrying in the Southwest Quarry will continue for approximately 8 more years. (Dewatering of this area will continue beyond this period to permit the construction and operation of the Southwestern Landfill during its operational period of approximately 20 years.) Quarry operations will then move north of the proposed landfill operation where new groundwater dewatering infrastructure (i.e. sump(s)) will be developed to permit quarrying operations to the north and over the full course of extraction period.

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Landfill Design and Operations (Vol 1, Section 7.2+)		6. How does the proposed landfill design (permeable final cover, liner system, backfill, and water/dewatering management) compare to that for Walker's South Landfill?	The proposed Southwestern Landfill is similar to Walker's South Landfill in Niagara Falls, ON in many ways including: • A former quarry setting; • Use of the *Generic Design Option II – Double Liner* as set out in O. Reg. 232/98; • A final cover as required under O. Reg. 232/98 for the generic liner system noted above; • Use of onsite soils for structural fill (i.e. backfill) beneath the liner; • Use of existing quarry dewatering infrastructure to maintain an inward groundwater gradient during the operational period and for contingency control (if required); and • Similar waste-type acceptance, total site volume and annual waste receipt volumes.
Landfill Design and Operations (Vol 1, Section 7.2+)		7. What is the current operating age of Walker's South Landfill? What have been the observed infiltration rates, leachate generation rates, and landfill gas generation rates to date?	Walker's South Landfill received EA approval in 2006, began receiving waste in 2009 and is now in its 11th operating year. Soils used for final cap at the South Landfill meet the infiltration requirements of O. Reg. 232/98. Observed leachate and landfill gas generation rates at the South Landfill are consistent with the predicted/modelled rates and within the capacities of the installed leachate management and landfill gas management systems.

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Landfill Design and Operations (Vol 1, Section 7.2+)		8. Appendix D, Section 1.5.1.3: Upon deactivation of quarry dewatering one would predict the lake level to be similar to the surface water elevation of the Thames River. What is the rationale for using 267 masl and not the surface elevations of the Thames River (>269 masl at SW6)?	Assumptions regarding the long term, post-dewatering water levels were based on Carmeuse's most recent quarry rehabilitation plans, currently undergoing approval by the MNRF. However, it is worth noting that based on the total limestone resources owned by Carmeuse, quarry dewatering at this site may continue for several hundred years (possibly exceeding the contaminating life span of the landfill). Post-closure monitoring over this extended period will permit ongoing refinement of the groundwater assessment to reflect actual conditions as the quarry dewatering system gradually evolves (i.e., an adaptive monitoring approach).

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Section 8.2	--	1. It appears that 453926 Clarke Road, 584366 Beachville Road and 584372 Beachville Road are not illustrated on Figure 6. Please advise whether these farm facilities were included in the Agricultural assessment and if so, where they are referenced in the report.	Location 453926 Clarke Road lies outside of the agricultural study area. It is assumed that the query refers to location 543926 which does contain an older barn that is screened from the roadway by trees and residences. This facility was missed during the field reconnaissance survey. It is located within a 32 ha (78 ac) land parcel that is owned by Grobrook Farms Ltd. Grobrook Farms also owns the adjacent 28 ha (68 ac) property located at 543976, where it has established a large dairy facility that is illustrated on Figure 6 of the report. It appears that the barn located at 543926 may also be used for housing cattle in combination with and in support of the adjacent dairy operation. It will be identified as a separate cattle facility on Figure 6 in the revised report. This barn is located approximately 2700 m south of the proposed

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			landfill, at the southwest corner of the agricultural study area. Location 584366 Beachville Road is a small residential, non-agricultural lot (0.14 ha or 0.35 ac). Next door, a larger property situated at 584372 includes two small barns or sheds. The reconnaissance survey identified some equestrian use on that property, however the use of the structures for equestrian housing was uncertain. It is possible that the residential property at 584366 is renting a portion of the adjacent agricultural property for summer grazing of a few horses. Figure 6 of the report will be amended to identify equestrian use of 584372. This location is situated approximately 2300 m from the proposed landfill. In addition to the above amendments to Figure 6 of the draft report, the text of Section 9.2.1.3-Agricultural Land Use, will be adjusted to reflect the inclusion of these two facilities in the agricultural baseline data. These additions will not affect the potential and net effects agricultural analyses contained in Section 10 of the report.
Section 10.1.1	Potential Effects/Page 33	2. (i) Is the 25 m the travelled portion of the access road (including shoulders), or does the 25 m represent the access road corridor width? (ii) The indication is that the haul route/access road will be rehabilitated. Is Walker prepared to commit that it will be rehabilitated back to agriculture?	(i)The 25 m is a measure of the access route corridor width. (ii) The access road across the Carmeuse property will be returned to the quarry operator at the completion of the landfill operations. It is within the current *Aggregate Resources Act* licence, so the quarry operator will eventually mine through this area and then rehabilitate it in accordance with the approved licence (currently a combination of lake and greenspace).

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Section 6.4.4.2	Page 51	3. Environment Potentially Affected – Agricultural Rehabilitation/Page 51: What criteria will be applied to selection of the 0.6 m of final cover material, and what will be the source of cover material? Is it intended that the final rehabilitation plan provide for agriculture as a possible end use?	The criteria that will be applied to the final cover material will be consistent with the criteria provided in O. Reg. 232/98 and the Landfill Standards. It is assumed that the soil onsite (i.e. overburden from quarry operations) will be used as the source of final cover soils. For the purposes of the environmental assessment studies, the potential end uses for the site are assumed to include passive green space and agriculture. However, the landfill will be designed with sufficient flexibility to accommodate other potential end uses, to be determined near the time of closure and subject to applicable regulatory approvals and community consultation at that time.

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Vol 1, Table 7-8		1. Please explain why the summer and winter precipitation levels do not add up to the annual numbers. Are spring and fall data missing? Were annual data used in the climate change calculations, or just summer and winter?	The climate change table was extracted from data presented in the document: McDermid, J., S. Fera and A. Hogg. 2015. *Climate change projections for Ontario: An updated synthesis for policymakers and planners*. Ontario Ministry of Natural Resources and Forestry, Science and Research Branch, Peterborough, Ontario. Climate Change Research Report CCRR-44.

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			From the MNR climate change report, the annual, summer, and winter values were selected from the climate projections for the Great Lakes basin and represent the mean values based on the "medium" representative concentration pathways. The 2015 study focuses on winter and summer to illustrate the two extreme effects of climate change, however spring and fall data is considered in the annual value. The three study periods covered are as follows: Annual: January to December Winter: December to February Summer: June to August The sum of winter and summer do not equal the annual value. Spring and fall data are not presented in the MNR report but are available through the Canadian Forest Service regional, national, and international climate modelling. Climate change was not explicitly included in the assessment of maximum worst case impacts from the proposed site. The modelling considers a 5-year set of hourly meteorological data with predicted impacts based on the worst-case conditions within this dataset. Predicted changes associated with climate change are not expected to change the future wind climate and meteorological conditions to a degree that would affect the landfill assessment.
Section 7.1.1	p.8	2. a) On the basis of what calculations or factual substantiation is the claim made that 85% LFG capture efficiency can be achieved? If it is based on Walker South landfill experience,	a) The landfill gas collection efficiency is estimated at about 85% of the total gas production based on

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		please provide the assumptions and analysis that substantiate the comparability with the proposed Southwest landfill in terms of design, cover material, waste characteristics and environmental conditions. b) Under these conditions, what is the estimated CLS Walker is using throughout this EA?	operational experience at Walker Environmental's South Landfill and other similarly designed landfills. The US EPA's AP-42 Chapter 2.4 includes a range of collection efficiencies from 95% for a well-designed and maintained LFG collection system at a landfill with a geotextile cap to 50% for an unlined landfill with a porous cap and non-aggressive operation and maintenance program. The assumption of 85% collection used for the Southwestern Landfill is consistent with the range provided in AP-42. Both the South Landfill and the proposed Southwestern Landfill are/would be owned and operated by Walker Environmental; the overall design and operational practices will generally be consistent between the two facilities. Both landfills are designed to receive a maximum of 850,000 tonnes per year of solid, non-hazardous waste, with an additional 250,000 tonnes of daily and intermediate cover materials (soils) for a total combined waste receipt of up to 1,100,000 tonnes per year. The general waste characteristics and cover material are expected to be similar between the two sites. Based on South Landfill data from the 2018 calendar year, as used for NPRI reporting, the landfill generated 46,880,000 cubic meters of methane (based on the US EPA's LANDGEM model) and a total of 41,600,000 cubic meters of methane was consumed in the on-site flares and generator (as measured using flow meters on the equipment). This resulted in a collection efficiency of greater than 88%, indicating that the assumed 85%

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			collection efficiency used in the Southwestern Landfill EA is reasonable. Walker, through its partnership company, Integrated Gas Recovery Services Inc., operates landfill gas-to-energy facilities at six landfills (both private and municipal) across Ontario. With over 20 years of experience designing, building, owning and operating landfill gas-to-energy facilities, Walker is demonstrating its ability to maximize landfill gas collection, recovery and beneficial re-use. b) The length of the contaminating lifespan was not considered in the air quality assessment. For the purposes of air quality, the impacts are compared to peak period standards (1hr, 24hr, annual), rather than lifetime effects. The air quality assessment was based on worst-case periods, either during or immediately after the operating life of the landfill, as outlined in the report. All subsequent periods would have lower emissions than what is presented in the AQ assessment.
Section 7.3.1	p.12	A) The Air Quality study relies on data obtained from Walker's South landfill site that odour will be well managed. On what information or assessment of the facility design and environmental conditions of the proposed and existing sites is the conclusion drawn that these sites and their operating parameters are comparable?	As both the South Landfill and the proposed Southwestern Landfill are/would be owned and operated by Walker Environmental, the overall design and operational practices will generally be consistent between the two facilities. Both landfills are designed to receive a maximum of 850,000 tonnes per year of solid, non-hazardous waste, with an additional 250,000 tonnes of daily and intermediate cover materials (soils) for a total combined waste receipt of up to 1,100,000 tonnes per year. The general waste characteristics and cover material are expected to be similar between the two sites.

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Section 7.3.1	p.14	B) Why were contaminants m-cymene and limonene not assessed? Both of these compounds were measured in the ambient monitoring program as shown in Tables 5 (page 21) and 10 (page 27), and they are listed contaminants to be assessed in the approved TOR developed with the MECP.	Concentrations of contaminants within the raw landfill gas were obtained from one of two sources: testing of the raw landfill gas at Walker's South and East landfills in Niagara or from default values published by the U.S. EPA in their AP-42 document. M-cymene and limonene were not present in either of these data sources, and no other information was available as to their concentrations in the landfill gas, therefore, they were not included in the modelling assessment.
Section 7.3.4		C) How was the additional mitigation for odour emissions at the partially covered leachate and aeration ponds modelled?	The leachate and aeration ponds were modelled as area sources, with emissions applied in terms of grams of contaminant *per* square meter of area. The additional mitigation was modelled by keeping the total surface area of the ponds consistent but reducing the emission rate *per* square meter by the required control (60%).
Section 10.1.1/31/Tables 24-27		D) Were the LFG effects modeled and presented for all sensitive receptors developed in the EA Report Volume 1 (Table 7-7) including ZOR-14 through ZOR-18, ING-11 and SWO-21 and 22? If so, where are they presented?	Results are modelled and presented for all common receptors deemed relevant for the air quality discipline, as provided in **Table 7-7** of the EA. Receptors ZOR-14 through 18, ING-11, and SWO-21 and 22 were not listed as relevant for the air quality discipline, and results are not presented for these locations. These locations generally represent ecological receptors, rather than residential locations or other locations where human activity occurs.

CULTURAL HERITAGE *(App.F-4)*		JMCC PRT	WALKER ENVIRONMENTAL GROUP
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Section 6 Page 7		1. Was the identification and screening of potential cultural heritage resources limited to common receptor points?	The common receptor points formed the basis for the review (since those are the agreed-upon receptors), but other resources could be, and were, identified. An example is the onsite residence and barn, which were not a receptor but identified as a potential onsite resource. The approach to the study area and resources is outlined in Section 6 of the 'Cultural Heritage Resource and Cultural Heritage Landscape Assessment Report'.
Section 7.6 / Figure 6		2. Why was ZOR-7 not screened for potential CHVI? 334652 and 334655 33rd Line are clearly more than 40-years of age and fall within the 1-km buffer delineated in Figure 6.	ZOR-7 is located well beyond the 1 km buffer, was screened out, and not identified or evaluated by the team. 334652 and 334655 (represented by ZOR-9) were not included, as they were near the periphery of the 1 km study area and determined to have no potential for impact as a result of the proposed operation. This is similar to other locations at the periphery which were not carried forward to the more detailed evaluation. As outlined in Section 9.2.3 of the MHBC report, the 1 km radius was used a preliminary screening area with a focus on the site and 500 m study area.
Section 7.3.9.1/133		3. Were other features (i.e. not buildings) more than 40-years of age considered in this review?	While the focus was certainly on buildings, other cultural heritage features were also included where applicable (e.g. cemetery site) and formed part of the evaluation. The evaluation also considered cultural heritage landscape potential.

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Section 2.2.2, Part 1		1. Why are the Patterson & Robbins Drain and features identified in the Oxford County NHS Study as "ecologically important" not brought forward for discussion/assessment in Section 5 of the report?	The Patterson & Robbins Drain is addressed in the Potential Effects sections of the report with respect to water quality, flow and aquatic habitat. It was advanced for further consideration and is addressed in detail in Section 10.4.1.2 of the Environmental Assessment.
Section 3.1.2.3, Part 1		2. Please describe in some detail the restrictions that were placed on the fish collection permit.	Restrictions placed on the fish collection permit included: • Specific staff members. • Limitations on the type of sampling equipment: backpack electrofisher, dip nets, seeing nets, block nets, hoop nets, plastic buckets, jon boat, angling gear, gill nets and waders. • All fish to be released alive (except for gill net). • Only survey areas identified in the licence: Quarry Lake, Thames River, Thames River tributaries within the boundaries of Road 66 on the north, 37th Line on the east, Karn Road on the south and 33rd Line on the west. • Locations to be reported using GPS.
Section 3.1.3.3, Part 1		3. Why were the full array of biotic indices identified in the Ecology Work Plan not calculated?	Of the 7 indices for benthic data that were proposed, 3 were not calculated, but one was added, the Shannon Diversity Index. Total density and relative density were not calculated since the Shannon and Simpson Diversity Indices incorporate a measure of density, therefore simple measures of density were considered redundant. Similarly, % dominance, which is the 3rd index that was not calculated is incorporated into these indices. Rather than the calculation of % Diptera, % Chironomids was calculated instead, which illustrates the same

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			phenomenon, being that a decrease in % corresponds to increasing perturbation of the environment.
Section 10.4, Part 2		4. Please advise whether the PWQO or the CCME toxicity guideline for Selenium was used and how it was integrated into the overall interpretation of potential water quality impacts.	Potential selenium concentrations were assessed as part of the Surface Water Assessment. Predicted selenium concentrations for all flow scenarios can be found in Appendix E – Receiving Watercourse Water Quality Analysis. Selenium concentrations were estimated using the baseline water quality in the receiving watercourse, the predicted leachate treatment discharge quality and the SWMP design removal (assumed 80% solids removal and 50% of parameter concentration was in dissolved form) of similar land use runoff water quality. Under certain flow scenarios, predicted selenium concentrations are estimated to exceed CCME guidelines. The source of these estimated exceedances are the leachate treatment discharge and the SWMP discharge. The PWQO for selenium is not expected to be exceeded.
Section 10.4, Part 2		5. What assumptions or calculations has the assessor used to understand (a) the effects of quarry discharge on the quantity and quality of surface water within the Thames River, and (b) how surface water quantity or quality will change as quarry dewatering increases and/or as the landfill operations come online?	Potential water quality or stream flow effects were assessed as part of the Surface Water Assessment. Over the project timelines, the quarry discharge was assumed to increase at a rate similar to the quarry footprint (which was provided by Carmeuse). The quarry discharge water quality was assumed to be similar to the existing conditions, since their operations will remain similar to existing conditions. Over the project timelines, the flow and water quality in the Thames River is expected to experience very little change as a result of the project or the Carmeuse Quarry. This is largely attributed to the large drainage area contributing flow to the Thames River from upstream, in comparison to the relatively small footprint area of the project and the Carmeuse quarry operation.

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Section 4.1, Part 3		6. What discussions were held with Woodstock Airport and Tillsonburg Airport management regarding the potential bird strike hazard associated with the undertaking? Are these discussions documented in the EA?	During the study, consultation with the Management of both the Woodstock and Tillsonburg Airports was undertaken. The consultation was documented in copies of e-mails that are provided in Appendix 1. At the initiation of the consultation, both Managers were aware that the purpose of the study was to assess the potential hazard and risk to operations at their airport as a result of the proposed operation of the Southwestern Landfill. The purpose of the study was discussed during a site visit with the Manager of the Tillsonburg Airport on February 18, 2018, and *via* e-mail with the manager of the Woodstock Airport. Two additional e-mail correspondences with the Woodstock Airport could also be included in Appendix 1. During the consultation process the Managers of these airports did not identify a concern regarding the bird strike hazard/risk potential at their airport as a result of the operation of the Southwestern Landfill. Had such concerns be raised, they would have been documented as part of the studies consultation process.
Section 6.4 / Pg.32, Part 3		7. Was the bird hazard potential analyzed in accordance with Transport Canada's Airport Bird Hazard Risk Assessment Process? If so, where is that analysis reported in the EA? If not, why not?	The scope of the Bird Hazard Assessment was not to undertake formal Airport Hazard Risk Assessments for multiple airports, but rather to look at a potential interaction between high risk species that might be attracted to the proposed landfill and aircraft flightlines. The TC Assessment process includes detailed land use assessments and other steps around each airport that are not relevant to the specific question of the landfill. Regardless, we did apply the principles of the process in so far as they applied to the question at hand. For example, the identification of the Primary and Secondary Bird

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			Hazard Zones for the Woodstock Airport and assessment of the airside lands and adjacent lands.

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Section 3 / Page 8		1. Please itemize the categories of the reported $218 million in capital expenditures and $277 million in operating expenditures over the life of the 22-year construction and operation life of the landfill. Are these figures in 2018 dollars?	The following is a summary of key operating and capital expenditures, but not inclusive of all items, that will be required to develop and operate the Southwestern Landfill. Operating Cost Items: • Operating Labour • Equipment Costs • Fuel • Royalties • Insurance • Leachate Management • Earth moving • Engineering • Scales Labour • Environmental Monitoring • Landfill gas control • Electricity • Misc. Operating Costs • Closure Costs • Post Closure Care Costs • E, H&S Programing

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			• Sales & Marketing • Operational Management Capital Cost Items: • Site Works/Earth Moving • Landfill Liner materials • Landfill Liner construction • Engineering • Equipment (compactors, dozers) • Dust control water truck • Site pick-up trucks • Leachate Collection System and Treatment Facility • Roads • Road sweeper truck • Scalehouse and Inspection stations • Maintenance shop • Site Office • Site security/fencing • Landfill Gas Collection and Control System • Odour Control System • Environmental Monitoring Infrastructure These figures are in 2018 dollars.
Section 9.2.1.2 / Page 29/30		2. Does the information provided refer to <u>place of work</u> (businesses in the municipality) or <u>place of residence</u> (employees living in the municipality)?	The information provided is associated with place of residence.
Section 9.2.1.4 / Page 32-33		3. Does the income information refer to jobs in Oxford County or jobs held by residents living in Oxford County (and potentially working outside of the County)? What was the original year of the average income data? Also, in Tables 9.7 and 9.8, which	The income information refers to the average income for a resident living in Oxford County and holding a full-time equivalent job either within the county or elsewhere. The original income data year was 2015.

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		data refer to residents of the municipality versus employees working in the study area? How was the average in Table 9.8 calculated? Was it weighted?	Table 9.7 refers to households in the area municipalities. Household members could work in or outside of the municipalities. The original income data year was 2015. The average wage numbers by industry cited in table 9.8 were derived from EMSI Analyst specifically for the municipal grouping of Ingersoll, Zorra and Southwest Oxford. There is no reference made in the program with respect to weighting.
Section 10.1 / Page 57		4. (i) What is the basis for the assumption that roughly 95% of capital expenditures will be made in Ontario? Is this produced by the I/O model? (ii) What method was used to determine that $148 million in capital expenditures will be made in the Wider Area? (iii) On what basis was it concluded that all operating costs will be made in Ontario? Are all inputs available in the Province? (iv) On what basis (source?) was it determined that 86% of operating expenditures will be made in 'the wider area' and the remaining 14% in the rest of Ontario?	The I/O modeling projected 95% of capital expenditures would be accommodated by industries in the Province. Based on Walker's experience with their East and South Landfills in Niagara, 2/3 of their capital needs were available in GGH, South West Economic Regions with the rest coming from other parts of Ontario. The I/O modeling projections and Walker's own experience indicate that all operating inputs are available in the Province. This is the experience of Walker with their Niagara landfills. The GGH and South West Ontario economic regions dominate manufacturing and service supply in Ontario.
Section 10.3.1.2 and 10.3.1.3 / Page 67		5. (i) In Table 10.5, Are the Economic Output figures for the Wider Area derived by the I/O model? (ii) Please reference the analysis carried out to determine that there are local companies with the necessary product lines	The I/O model only outputs numbers at the provincial level. Regional captures where done through allocation modeling taking into account industry sector concentrations in economic regions and through reference to Walker's own experience with their Niagara Landfills.

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		and expertise to provide the goods and services needed by the project.	Walkers has indicated that they will give preference to local sourcing and when the time comes, they will reach out to local companies as appropriate for capital and operating inputs. Product lines and services such as earthmoving, general contracting, trucking, aggregates, fuel supply, heavy equipment supply and maintenance, trades, etc. all are available in the local area.
Section 10.3.1.5 / Page 68		6. a) Table 10.6, to which geographic region do the Statistics Canada data on household spending apply? Are the data based on averages for Canada, Ontario or something else? b) Table 10.7, how was total disposable income calculated (e.g. $164.5 million in total). c) Were commuting patterns and availability of consumer products considered to test the assumption that the geographic distribution of household spending would mirror the distribution of project expenditures?	The household spending statistics were generated by Statistics Canada at the Provincial Level. The household spending apportionments derived from the above were applied to the labour income projections produced by the I/O model. Commuting patterns as outlined in the Hemson 2019 Report were taken into account as were the population and industry sector concentrations for the economic regions in Ontario. A huge spectrum of goods and services to meet household needs are in the available in the wider area.
Section 10.3.3.2 / Page 82		7. Walker's South Landfill in Niagara has been used as a proxy for forecasting current value assessment. Please explain how the location characteristics of the proposed undertaking relate to Walker's South Landfill location to validate this approach.	All landfills are assessed as vacant industrial. Walker's South Landfill in Niagara has been used as a proxy for the purposes of this report. It is situated in a former quarry and is roughly similar in size and operation to the facility proposed. It is located in the City of Niagara Falls in proximity to housing, commercial and institutional uses. Without a definitive CVA for the proposed facility, use of the CVA for Walker's South Landfill applied to the Township of Zorra's vacant industrial land tax rate was felt

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			to be a reasonable means for calculating potential municipal tax generation.
Section 10.3.4.1 / Page 84		8. What is the basis for the estimated cost saving of $10 per tonne? How was this figure calculated?	A report commissioned by Oxford County and prepared by AET, May 2017 titled "Industrial, Commercial and Institutional (ICI) Waste in Oxford County" concluded that approximately 21,000 tonnes of ICI waste is exported out of Oxford County for disposal. It is (conservatively) assumed that this waste is disposed of at the nearest privately owned landfill which is the Ridge Landfill, owned by Waste Connections and located in Blenheim, ON. This site is approximately 160 km from Oxford County. Transportation of waste from Oxford County to Blenheim, ON would conservatively represent a 4 hour round trip (not including approximately 1.5 hrs to collect waste at the source and to unload waste the disposal site). It was conservatively assumed that ICI waste would be transported via a walking floor trailer which has a nominal payload of 30 tonnes. A walking floor trailer and tractor cost approximately $130/hr. to operate. Therefore, the *per*-tonne cost of transporting ICI waste generated in Oxford County to the Ridge Landfill in Blenheim, ON would be approximately $17.3/tonne. Recognizing that there would still be minor transportation (i.e. less than 1 hr) costs associated with collection of ICI waste in Oxford County and disposal at the proposed Southwestern Landfill, it was conservatively estimated that

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			a savings in transportation costs for ICI waste would be approximately $10/tonne.
Volume I, Section 7.4.4 / Page 159		9. What is the basis for the statement that area businesses will save in the range of $200,00 to $250,000 per year?	The statement is formed on the basis that 21,000 tonnes of ICI waste is exported out of the County for disposal as noted above in question #8. The estimated cost associated with transportation of this waste, also as noted above, is approximately $10/tonne. Therefore, by providing a local disposal option for ICI waste generated within Oxford County, local businesses and institutions could save approximately $200,000 to $250,000 per year in waste disposal costs.

TRAFFIC *(App.F-9)*		JMCC PRT	WALKER ENVIRONMENTAL GROUP
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		1. Why were Oxford County requirements for conducting Traffic Impact Studies not referenced and applied?	During the preparation and consultation on the Terms of Reference and the subsequent Work Plans, there was no request to use these requirements. Upon review of the guidelines, we are not aware of any specific requirements that the traffic assessment did not meet the County's guidelines.

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Section 10.2, Page 43		2. Please clarify whether the synchro model used for the traffic analysis was calibrated to represent existing traffic operations accurately; and if so, how it was calibrated at the crossing location when the maximum observed queue was only 3 vehicles.	The Synchro model was calibrated to the represent existing traffic operations by checking the modelled travel time between each intersection against observed travel times. The maximum observed queue was 3 vehicles at the rail crossing based on our field visit and this is consistent with the findings from the Synchro model.
Section 12.1.2, Page 50		3. Please provide supporting information (e.g. traffic counts at other Walker landfill sites) showing how the 1,100,000 tonnes of waste and cover soils shipped annually will be distributed over the months of the year and days of the month to confirm any variations in traffic volume over the course of a year, by day of the week and by hours of the day.	Trip generation by time for typical weekday and for Saturdays for waste and cover soils traffic is provided in Table 12-1 of the traffic assessment. While traffic counts (i.e. inbound scale trips) from the South Landfill in Niagara were considered, they are not representative of truck traffic associated with the Southwestern Landfill (i.e. the South Landfill has more small local collection trucks due to a larger density of businesses proximate to the landfill).
Section12.1.2, Page 50		4. Please provide truck characteristics in terms of length, normal carrying capacity in tonnes of waste/soils and haul distance to confirm the operating characteristics of these vehicles.	The following assumptions for typical truck characteristics were used (note truck lengths vary): <u>Waste</u> Walking Floor – 32 tonnes Front-end/Roll-off – 6 tonnes <u>Waste Soil</u> End-Dump – 35 tonnes Tri-axle – 20 tonnes The haul distance varies from local waste generators to waste generators outside of the County.

TRAFFIC *(App.F-9)*		JMCC PRT	WALKER ENVIRONMENTAL GROUP
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		5. We assume that any future waste diversion facility would be located at the landfill site within the operational periods or possibly in the post-closure period. In the event such a facility is proposed, what traffic related approvals would be required before construction can begin?	In the event future waste diversion facilities are developed at the landfill site, the necessary traffic related approvals will be determined by the type of facility, provincial regulatory requirements and in consultation with the local municipality/County.
Volume 1, Section 7.2.15.2		6. Future baseline conditions are assessed at 2040 in the noise assessment and it is assumed that maintaining current ambient noise levels from traffic is a conservative assumption notwithstanding increases in population and traffic levels, which is counterintuitive. The traffic assessment discusses future baseline conditions at 2033, not 2040 or 2043. It is not clear what future traffic volumes are used for the noise study since the traffic study doesn't provide a traffic forecast beyond 2033 or a population and employment growth rate beyond 2038. Please provide the data and explanation for these forecasts.	When considering stationary sources, traffic data from the County were used to determine a limit that is higher than the default at receptor SWO-4. The sound level from current traffic is lower than future traffic. The use of current traffic results in a limit that is quieter/stricter, which is conservative. Traffic volumes from the traffic assessment were used in the haul route assessment. The 2033 data were used for future baseline conditions. Baseline traffic volumes were not grown to 2040 or 2043. The choice to not grow the future baseline traffic volume makes the Carmeuse and landfill traffic comparatively larger.

GROUNDWATER *(App.F-10)*		JMCC PRT	WALKER ENVIRONMENTAL GROUP
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		1. Why was a pumping test(s) not completed to characterize the overall hydraulic characteristics for the conceptual hydrogeological model?	The site is not a 'greenfield' site and there are pumping dynamics (observable drawdown and gradients) within the zones of interest due to active dewatering. The drawdown in groundwater levels within the monitoring wells is observed in response to large scale pumping associated

GROUNDWATER *(App.F-10)*		JMCC PRT	WALKER ENVIRONMENTAL GROUP
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			with quarry dewatering. In addition, there is a clear technical basis for characterizing the hydrostratigraphy using packer testing, monitoring well response testing and groundwater modelling, which also considered the effects of the large-scale pumping of the quarry. An excerpt from the Karst Study as presented in Appendix E of our report with some additional commentary is below: *Tracer testing is a commonly-used investigation technique in karst investigations, especially to determine the destination of stream water lost at karstic sinkpoints. However, no karstic sinking streams were identified at or near the site in the current investigation. Tracer testing during a pumping test was also considered. This would give evidence on the apertures of the larger fractures where preferential flow is taking place. However, it was decided that more comprehensive information on preferential flow could be gathered from wells across the site by using a combination of packer testing, monitoring well response testing downhole video, and flowmeter logging.* Had the Karst Study found a substantial shallow transmissive zone, local pumping test(s) of karstic features may have been completed. *Accordingly, tracer testing during a pumping test was not considered to be required given the results of the karst study.*
Figure 8.4		2. Where is Well 7 located on Figure 8.4 – should it be between Well 2 and Well 3?	Yes, we confirm that Well 7 is located between Wells 2 and 3 near MN 450 Thomas St., Ingersoll. Well 7 is inactive but can be included on a revised Figure 8.4 in the final report, as required.
		3. As no water conditions are provided in the borehole records, is it interpreted that there are no saturated conditions within	We can confirm that the groundwater levels observed at locations MW17-5 and MW17-6 are representative of the

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		the shallow weathered zone at MW17-5 and MW17-6 and that the groundwater levels detected in the deeper wells in the Lucas Formation are representative of the Lucas Formation water table. Please confirm.	Lucas Formation phreatic surface (water table). We will consider providing a revised Figure 8.8 and contour plan in the final report after ongoing monitoring to demonstrate this more clearly.
Section 8.2.3.2, page 19		4. A comparison of the geometric mean for the packer tests to the slug tests over similar test intervals indicates typically higher hydraulic conductivity results for the slug tests. Why did the conceptual hydrogeological model and assessment report only focus on the packer test results?	The single well slug tests provide a "bulk" hydraulic conductivity value for the screened or open interval of a given well. As such, they provide hydraulic conductivity information for isolated sections of the borehole. In addition, they may have a bias towards a smaller, highly transmissive feature within a larger rock mass. The packer tests isolate a discreet interval providing a continuous profile along the length of the borehole. Many packer tests were completed within each hydrogeological unit to allow for detailed characterization. The evaluation of the hydraulic conductivity of the rock mass and the conceptual model utilized data from both packer tests and monitoring well response tests.
Section 8.2.4, Page 20		5. Where is background information (GHD data and well logs) found that is presented in Figure 8.8? Why is the groundwater elevation at OW3 about 10 m higher than at other nearby wells?	The GHD information was collected from the report referenced on Figure 8.8 (also GHD 2016/2017 Monitoring Report, Carmeuse Lime (Canada) Limited, Ingersoll, Ontario, Figure 6.0). The wells included on Figure 8.8 are for visual representation only as the wells acquired from the PTTW monitoring activities are believed to be mostly open-hole completion bedrock wells with no depth or well construction details available. OW3 is influenced by the water levels in the Thames River flowing adjacent to it and is not necessarily representative of the shallow bedrock groundwater conditions at its location.
Section 8.2.5		6. Are the water levels presented in Table 1 for MW17-3D representative of static conditions or are they influenced by the well purging?	All groundwater elevations are measured at each monitoring well prior to purging or sampling. MW17-3D is installed in the till at about elevation 270 masl. This well

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			yields very little water. To date, inadequate water for sampling has been available at MW17-3D.
Section 9.2.1.8		7. There is no reference to a PTTW for the West Quarry Sump within the Southwest Quarry. Is it part of the Centre Plant PTTW?	Yes, the water from the Southwest Quarry is included as part of the discharge from Centre Plant under the PTTW. From R03, "Currently, water that accumulates on the active quarry floor (Southwest Quarry), either through direct precipitation, runoff or groundwater inflow, is directed (primarily via passive gravity flow supplemented with some satellite pumping) to settling ponds located in the Centre Plant area immediately north of the Thames River."
Section 9.2.1.8		8. How does the 2018 water taking compare to the 2017 data in terms of historic patterns – were the 2018 data considered for the Surface Water Assessment report? Is the East Plant (Surface Water Assessment report) and East Quarry discharge point the same?	At the time of preparation and delivery of this report, the most recently issued GHD report documented the 2016-2017 monitoring activities. The East Plant is located within the East Quarry and any water from the East Quarry is collected in ponds prior to discharge to the Thames River using the same discharge point.
Section 9.2.1.10		9. Where are the 'pre-existing regional interpretations (Golder, 2010)' presented/summarized in this report for consideration/review? Sections 8.1.1 and 8.1.2 provide regional frameworks, but do not indicate the noted reference of Golder 2010. References include Goff & Brown and CRA.	The report in question is cited in Section 15 References as follows: Golder Associates Ltd., 2010. Appendix A Groundwater Vulnerability Assessment for the Wellhead Protection Areas (Groundwater Modelling Study). Submitted to County of Oxford. 10-1152-0017. October 2017. Please note that correct citation is: Golder Associates Ltd., 2010. Appendix A Groundwater Vulnerability Assessment for the Wellhead Protection Areas (Groundwater Modelling Study). Submitted to County of Oxford. 10-1152-0017. October 2010.

GROUNDWATER *(App.F-10)*		JMCC PRT	WALKER ENVIRONMENTAL GROUP
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			The Golder, 2010, report describes the preceding regional scale numerical (MODFLOW) model that served as a foundational basis for the current modelling. The term "regional interpretations" in this context refers to the 2010 model's quantitative inputs such as hydrostratigraphic surface grids and hydraulic parameters (recharge rates, hydraulic conductivity etc.) in areas far-field from the Site but within the model domain. A copy of the Golder, 2010 report may be provided to the reviewer pending authorization by the County of Oxford (or directly from the County *via* the JMCC).
Section 9.2.2	Bullet 1 Bullet 3	10. Based on Figure D-14 it appears that Phase A is the southern portion of the Southwest Quarry – is this correct? What is the source of 253 masl for the Former West Quarry lake?	Phase A is the title given to the southwest portion of the Southwest Quarry in the Beachville Quarries Operational Plan 2 of 5 (MHBC, 2018). The Former West Quarry water elevation was derived from Figure 5.10 West Quarry Pond Hydrographs presented in "*2016/2017 Monitoring Report, Carmeuse Lime (Canada) Ltd. Ingersoll, Ontario*" (GHD, 2018). We infer from this figure that the most recent average annual water level (2017) at the lake was approximately 253 masl.

SURFACE WATER *(App.F-11)*		JMCC PRT	WALKER ENVIRONMENTAL GROUP
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		1. Was the volume of clean precipitation and groundwater that has not come into contact with the waste considered when designing the SWM Ponds?	Yes, the SWMP design considers volumes of precipitation runoff from clean covered site areas under the various phases of the landfill. Precipitation that may fall into the active areas of the landfill will be directed to the leachate collection system for treatment. The groundwater seepage was not considered under the project timelines because the dewatering of the adjacent quarry is expected to maintain groundwater levels well below the SWMP and the ground surface.

LAND USE *(App.F-12)*		JMCC PRT	WALKER ENVIRONMENTAL GROUP
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Section 10.2 / 24-26		1. The Land Use Assessment and Planning Justification Report relies on the other supporting studies in Volume III for justification that all requirements of the planning process have been fulfilled. Where in the Draft Environmental Assessment Report is compliance with the following PPS policies referenced: ○ 1.2.6.1 (Land Use Compatibility) ○ 1.6.10 (Waste Management) ○ 2.1.8 (Natural heritage) ○ 2.2.2 (Water) ○ 2.3.1 (Agriculture) ○ 2.6.2 (Cultural heritage (Archaeology)) ○ 3 (Natural and Man Made Hazards)	Compliance with the PPS is addressed through the Planning Justification Report (PJR). In order to clearly link the various studies, it is proposed to add a section to the PJR to demonstrate the links between the EA technical studies, PJR and other studies that provided the basis for our analysis.

NOISE *(App.F-2)*		JMCC PRT	WALKER ENVIRONMENTAL GROUP
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Section 9.2.1		1. In the noise assessment were the 2019 traffic volumes provided by the County adjusted using historical/projected growth factors to arrive at a 2020/21 existing baseline forecast just prior to construction. Please explain. (per traffic review)	The traffic volumes from the County were used to determine a sound level limit that is higher than the default at receptor SWO-4. The traffic volumes provided were not grown. The use of current traffic results in a limit that is quieter/stricter, which is conservative.
Section 9.2.1		2. Section 5 of the noise assessment indicates an existing base year for analysis of 2020 just before construction start. Please explain how the 2018 or 2019 volumes were scaled to represent the 2020 existing conditions for the Noise assessment. (per traffic review)	No scaling of traffic volumes was done.

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Section 9.2.2		3. Given the traffic assessment uses a 1.09 percent compound average growth rate to inflate 2018 volumes to 2028 volumes and a 1.02 percent CAGR to inflate 2028 volumes to 2033 volumes, on what basis is it assumed that ambient noise levels will remain at the same level as existing, and that the increased traffic won't have a noise effect either at the mid-point or just before closure of the landfill?	The 2018 data from the traffic assessment was used to calculate existing sound levels along the haul route. The 2033 data from the traffic assessment was used to calculate future sound level along the route. Carmeuse and landfill traffic volumes are a small fraction of the total. The sound levels therefore do not notably increase from the addition of Carmeuse and landfill traffic volumes.

SOCIAL *(App.F-13)*		JMCC PRT	WALKER ENVIRONMENTAL GROUP
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Section 7.4.4, Page 159		1. a. Does the PVP program cover increases in the length of time to sell or any difficulties with remortgaging? b. How are changes in property value determined and who pays for the assessment fees? Does the landowner get to choose the assessor? c. Are the landowner's legal fees covered? d. At what point in time does the PVP take effect and when does it end?	While the specific details of the SWLF PVP have not yet been finalized, the PVP program that Walker uses at its South Landfill in Niagara does not cover increases in length of time to sell but does provide a fixed term where if no sale occurs, Walker purchases the property for the agreed to price (based on third party assessments). The PVP program in Niagara does not address difficulties with remortgaging. In the Niagara PVP program, the landowner gets to choose an assessor. In the Niagara PVP program, the landowner's legal fees are covered by Walker, with a stipulated and reasonable limit.

SOCIAL *(App.F-13)*		JMCC PRT	WALKER ENVIRONMENTAL GROUP
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			In the Niagara PVP program, it takes effect when the landowner chooses to sell. It is not transferrable to the new buyer.
Section 8.2.3, Table 10		2. In total 7.7 per cent of the population in surrounding municipalities (Zorra, SW Oxford, East Zorra and Ingersoll) are classified as immigrants. Was consideration given to providing any of the information disseminated through the PAR and local residents survey in other languages?	Consideration is always given to local demographics in the design of a social impact assessment. In this case, the percentages of the overall population are small. The data show that that majority of immigrants arrived in Canada prior to 1981. Within the Site Vicinity Study Area, the Township of South West Oxford had the highest proportion of immigrants at 12%, 38% arrived prior to 1981 and 21% arrived between 2001 and 2010. Given these values, offering information in other languages was not deemed essential to the success of the PAR or general communications. Moreover, immigrants may speak a variety of languages, all of which cannot be accommodated in a PAR of this type. Monitoring of PAR interviews undertaken by Intellipulse and SLR did not indicate that language was a major barrier to participation in the PAR. Of the 25,967 calls attempted, only 81 (0.3%) were terminated due to a language barrier.
Appendix L, Page 5	Q19 & 20	3. Some respondents stated that they experience dust, noise and vibration from the quarry. Others reported odour complaints. Did SLR examine Carmeuse's complaints log? Are there other close-by odour emitters? If so, are there additional conclusions that can be drawn about the current quality of life of local residents?	It is noteworthy that Appendix L provides the top-line frequency results for the eight local residents who live nearest to the Site Vicinity. Section 8.2.7 "Use and Enjoyment of Residential Property" provides a more fulsome description of current issues affecting the use and enjoyment of property by local residents. Overall, the other close-by odour emitters are local farm operations, with some residents complaining about the smell of manure.

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			SLR relied on the results of other discipline analyses for input into the Social Assessment. A complete analysis of dust, noise, vibration and odour is provided in their respective Technical Support Documents. RWDI had reviewed annual monitoring reports for Carmeuse quarry operations.

HUMAN HEALTH *(App.F-15)*		PRT	WALKER ENVIRONMENTAL GROUP
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		1. Throughout the Risk Assessment (RA), including the Conceptual Site Model (CSM) it is stated that direct contact with surface waters and groundwater will be assessed in the RA, which would be consistent with the Ministry of Environment Conservation and Parks (MECP) regulatory approach. However, the RA does not assess these exposure pathways. It merely states that the pathway was blocked due to engineering controls (i.e. leachate control systems). This may be acceptable in a HHRA supporting an EA, but it is inconsistent with the stated approach and parameters set out in Table 1-2 (page 9). a. Please confirm which RA framework is being used and why; and, b. If the MECP approach is not used, what contingency measures are assumed to mitigate any health risk in the event of failure of the leachate collection system?	(a) Standard risk assessment process was employed which is consistent with that recommended by the MECP, Health Canada, and the US EPA. As part of the screening process, certain pathways were evaluated qualitatively based on the existence of engineering controls blocking potential exposures. Given the presence of these controls built into and integral to the proposed landfill design, there is little reason to quantitatively assess risks in the absence of these features. Some key mitigative engineering controls include a double composite liner system as required under O. Reg. 232/98, an onsite leachate treatment facility, a final cover system as required under O. Reg. 232/98 and stormwater management ponds, all further described in Section 7.2 – Description of the Proposed Undertaking (Facility Characteristics Assumptions).

HUMAN HEALTH *(App.F-15)*		PRT	WALKER ENVIRONMENTAL GROUP
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			(b) Section 8 of the Draft EA Report sets out programs for effects monitoring, reporting and contingency plans. In particular, Section 8.2.2.1 lays out three mutually supportive contingency measures that would each prevent exposure in the groundwater pathway (i.e., triple layers of contingency, in the unlikely event of a failure in the engineered liner system). Section 8.2.2.2 similarly describes multi-level surface water contingency plans.
		2. Please explain why the following COCs have been excluded from the RA. a. Metals, e.g., trace metals from truck brakes, tire wear, materials being transported as well as migration of metal-containing dust from Site soils. b. Polynuclear aromatic hydrocarbons (PAHs): why was only Benzo[a]pyrene assessed? c. Diesel particulate matter (DPM).	Metal, including from truck brakes and tire wear, are not typically evaluated in transportation risk assessments as they have not been shown to be a significant emission under standard operating conditions. Metals from site soils were not considered as noted in the RWDI dust report, "[t]he types of wastes proposed to be received are not generally expected to contain significant quantities of metals in the material. Therefore, the potential to release airborne metals with the handling and disposal of the material is low and a separate assessment of airborne metal emissions is not required." In the case of the current assessment, benzo[a]pyrene was evaluated as toxicity equivalency factors (TEFs) to represent the broader group of carcinogenic polycyclic aromatic hydrocarbons (PAHs). In other words, B[a]P emissions predicted by the air dispersion models encompassed not only B[a]P but all like-acting PAHs through the toxic equivalency (TEQ) approach recommended by the MECP. While reference values are available from some regulatory jurisdictions, they are very dependent on the chemical

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			fingerprint (i.e., the individual chemical makeup) of the emission source. As a result, the typical approach to evaluating diesel emissions as part of a transportation risk assessment is to evaluate the key chemical components of the DPM individually based on the air dispersion modelling so that risks can more appropriately be linked to the type of vehicles expected for the proposed Project. In this case, the individual elements of DPM that typically drives risk, including exposures to fine particulate, criteria air contaminants (*e.g.*, carbon monoxide, NO_2, SO_2), PAHs and specific volatile organic chemicals (*e.g.*, benzene, formaldehyde, toluene, *etc*.) were assessed both individually and cumulatively (where like-acting toxicological mechanisms existed).
		3. What soil management measures are proposed to ensure materials used for capping, cover and fill will meet soil quality guidelines to limit metals, PAHs, and other contaminants in soils, which could be blown off-Site as fugitive dust during construction and operational activities?	Soils that are used for structural fill (i.e. below the liner), liner or final cover must be 'clean' and meet Table 1 – Table 3 Background/Generic Site Conditions Standards (Agricultural) in addition the any applicable geotechnical criteria (i.e. clay content, organic matter, etc.) Soils that are used for daily and intermediate cover and classified as solid, non-hazardous waste under O. Reg. 347 will meet the requirements of O. Reg. 347. It is further noted that the Air Quality assessment in this EA considered fugitive dust and specifically assessed impacts from fugitive dust emanating from daily and intermediate cover management during the operational period.