

1. Risk Assessment Report for Planning Application No. A/NE-KLH/633

1.1 Scope of Work

The aim of this study is to address the comments from Water Supplies Department.

1.2 The Proposed Development

The application site is located at Yuen Leng Village, Tai Po. It has a total area of about 925.45m² and is currently vacant, flat and fenced off. The site has long been hard paved with no vegetation for more than 30 years. While the application site falls within the upper indirect Water Gathering Ground (WGG), there is DSD's public stormwater drains along the immediate west of the site.

The development proposal only consists of a temporary village car park with 20 parking spaces (private car only) and EV charging station for a period 3 years. It is intended to relieve the genuine demand for parking spaces to serve the villagers in the area. No toilet facility, car washing or repair activity will be allowed.

1.3 Assessment of Impact

Factors that may affect the WGG:

1. Discharge of effluent, sewage, or foul water;
2. Solid waste and sludge;
3. Use and storage of pesticides, herbicides, toxicants, chemical solvents, larvicidal oil, rodenticide, tar and petroleum, oil;
4. Use and storage of chemicals such as fertilizers and detergents;
5. Existence of oil leakage & spillage;
6. Close distance between structures & uses of the development and water courses;
7. Lack of fencing to trap wind-blown litters;
8. Kerbs & drains surrounding vehicle park/ drainage traps at each drainage outlet;
9. Lack of oil & grease decontamination kit;
10. On-site vehicle inspection, maintenance, repairing & washing activities/ machinery repairing;
11. Oil tanker parking inside vehicle park; and
12. Use of detergents & fertilisers.

In order to minimise the likelihood of the potential hazards as identified above, the Applicant has proposed a series of mitigation measures and are detailed in **Annex 1**.

1.4 Recommendations

To protect the integrity of the upper indirect WGG, there will be no blasting, drilling or piling permitted; no well will be sunk; and no excavation exceeding 2m within the Site. Proposed mitigation measures are detailed in **Annex 1** to minimise the likelihood of the potential hazards as identified in **Section 1.3** above.

The operation, maintenance of the electrical vehicle charging station is relatively clean, therefore it is anticipated that contamination and leaching of contaminants to the WGG would be very low.

The “Conditions of Working within Water Gathering Grounds” shall be complied.

1.5 Conclusion

All potential hazards are anticipated to remain at low risk or to be reduced after the implementation of mitigation measures. This report shows that contamination to be caused to the water course in the WGG by the proposed development is not anticipated.

Annex I

Factors	Potential Hazard	Likelihood	Consequence	Risk Level	Proposed Mitigation Measures	Likelihood	Consequence	Residual Level
1	Discharge of effluent, sewage or foul water	M	M	M	<p>No activity will produce foul water, sewage or effluent of the Site.</p> <p>No toilets will be proposed within the site. Therefore, no sewage will be produced at the site.</p> <p>Notice will be posted at the site to forbid any usage and storage of pesticides, toxicants, flammable solvents, larvicidal oil, rodenticide, tar, petroleum oil and fertilizers.</p> <p>Electric Vehicles (EV) do not produce any contaminants or petroleum waste such as oil leakage or spillage comparing with traditional cars. Nevertheless, oil and grease decontamination kit will be placed at the site to absorb any potential oil and grease that might be found on site.</p> <p>These measures would help prevent foul water or effluent discharging to the WGG.</p>	L	L	L

Annex I

Factors	Potential Hazard	Likelihood	Consequence	Risk Level	Proposed Mitigation Measures	Likelihood	Consequence	Residual Level
2	Soil waste and sludge	L	L	L	<p>As the site is solely for parking with EV charging station, there is on-site operation/ workshop activity at the site. No solid waste will be produced at the site.</p> <p>Any waste (expected to be small in amount) will be put into rubbish bins which will be placed at adequate location. It will be regularly collected and transferred to the nearest refuse collection point. The collection point is near Tai Po Yuen Leng Tsuen Gate (大埔元嶺村牌坊).</p> <p>No rubbish will be discharged into the U-channel.</p>	L	L	L
3	Use and storage of pesticides, herbicides, toxicants, chemical solvents, larvicidal oil, rodenticide, tar and petroleum, oil;	L	M	L	<p>No usage or storage of pesticides, herbicides, toxicants, chemical solvents, larvicidal oil, rodenticide, tar and petroleum, oil will be allowed at the site.</p> <p>Notice will be posted at the site to forbid any usage and storage of pesticides, herbicides, toxicants, chemical solvents, larvicidal oil,</p>	L	L	L

Annex I

Factors	Potential Hazard	Likelihood	Consequence	Risk Level	Proposed Mitigation Measures	Likelihood	Consequence	Residual Level
					rodenticide, tar and petroleum, oil.			
4.	Use and storage of chemicals such as fertilizers and detergents;	L	M	L	No chemicals such as fertilizers and detergents is allowed to be used at the site. Notice will be posted at the site to prohibit the use of chemicals.	L	L	L
5	Existence of oil leakage & spillage	L	M	L	EV do not produce any contaminants or petroleum waste such as oil leakage or spillage comparing with traditional cars. Nevertheless, grease trap will be installed. Oil and grease decontamination kit will be placed at the site to absorb any potential oil and grease that might be found.	L	L	L
6.	Close distance between structures & uses of the development and water courses	M	L	L	The only structure within the site is a cabinet and it is separated by the road, cycling track, and fence.	L	L	L
7.	Lack of fencing to trap wind-	L	L	L	An existing boundary wall has been erected on all sides to trap all wind-	L	L	L

Annex I

Factors	Potential Hazard	Likelihood	Consequence	Risk Level	Proposed Mitigation Measures	Likelihood	Consequence	Residual Level
	blown litters				blown litters such as paper, plastic bags, bottles and boxes from the Site.			
8.	Kerbs & drains surrounding vehicle park/ drainage traps at each drainage outlet	M	M	M	<p>Kerbs and drains are provided. Drainage traps such as grease traps and petrol inceptors are installed at each of the drainage outlets and sufficient capacity to ensure that proper collection and disposal of potential fuel and lubricants.</p> <p>Oil and grease decontamination kit will be placed at the site to absorb any potential oil and grease that might be found.</p>	L	L	L
9.	Lack of oil & grease decontamination kit	M	M	M	EV do not produce any contaminants or petroleum waste such as oil leakage or spillage comparing with traditional cars. Nevertheless, oil and grease decontamination kit will be placed at the site to absorb any potential oil and grease that might be found.	L	L	L
10.	On-site vehicle inspection, maintenance,	M	M	M	No vehicle inspection, maintenance, repairing and washing activities will be allowed within the site.	L	L	L

Annex I

Factors	Potential Hazard	Likelihood	Consequence	Risk Level	Proposed Mitigation Measures	Likelihood	Consequence	Residual Level
	repairing & washing activities/ machinery repairing				Notice will be posted at the site to prohibit vehicle inspection, maintenance, repairing, washing activities and machinery repairing.			
11.	Oil tanker parking inside vehicle park	L	M	L	No oil tanker will be allowed to be parked inside the site to avoid oil leakage or spillage. A notice will be posted at the entrance of the site to prohibit oil tanker to enter the site.	L	L	L
12.	Use of detergents & fertilisers	L	L	L	No detergents nor fertilisers will be used at the site. Notices will be posted at the site to prohibit the use of detergents and fertilisers.	L	L	L