Chapter 9 SUMMARY AND CONCLUSION

The potential environmental impacts and socio-economic issues associated with the construction and operation of the dye house at La Tour Koenig have been assessed in this EIA Report.

This EIA Report provides an assessment of the most important impacts, that is, air quality, levels of noise, wastewater generation, solid wastes disposal and landscape resource. A discussion of potential social and economic issues associated with the development is provided and an Environmental Monitoring Plan is also included.

RT Knits Ltd intends to operate a dye house in a building and the various sections will include:

- Production area
- Offices
- Boiler room
- Maintenance workshop
- Chemical store
- Laboratory

9.1 Findings of the EIA report

This EIA Report compared the advantages and limitations of the dye house and reviewed the probable impacts on the natural and built environment. It was also compared with the existing dye house situated at Le Hochet, Terre Rouge and the benefits of relocating the dye house at La Tour Koenig.
The major findings of the EIA Report are mentioned hereunder:

9.1.1 Minimum impacts

The S.L.D.C New Industrial Park has been an initiative of the Government of Mauritius for the development of the textile industry as infrastructures such as electricity and water supply, sewer networks and roads were already installed to meet the demand of this sector. The proposed dye house will replace the existing one at Le Hochet and hence, will contribute to reduce the current vehicular flow to and from the dye.

Moreover, the project site has suitable geotechnical conditions such as prevailing south easterly winds minimizing significantly potential air quality impacts on communities and is not far from La Chaumière for disposing of wastes.

9.1.2 Impacts during construction and operational phase

The major impacts associated with the setting up of the dye are dusts, noise, air emissions, wastewater, but such impacts would be minimized following the implementation of mitigation measures proposed in Chapter 6 of the EIA Report. The building will be designed in such a way as to exploit natural lighting and ventilation, which will further reduce electricity consumption.

9.1.3 Environmental impacts and mitigation measures

A summary of the potential impacts, mitigation measures and likely residual impacts associated with the dye house is provided in Table 9.1.
## Table 9.1: Summary of potential impacts and mitigation measures

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<th>Impact Assessment</th>
<th>Mitigation measures</th>
<th>Residual impacts</th>
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| Air quality | Dispersion modelling indicated that emissions of air pollutants (sulphur dioxide) were well within the limits listed in the standards for air regulations | • Employing good construction practices to minimise construction dust (e.g. sheeting of stockpiles, spraying working areas with irrigation water)  
• Frequent servicing and tuning of boilers  
• Installation of solar water heaters and heat exchanger to reduce the amount of fuel burnt  
• Air pollution control equipment will be installed | • Negligible impacts for construction dusts or traffic pollution  
• Impact for sulphur sioxide well within the limits |
| Noise       | A quantitative assessment carried out at the existing dye house indicated if the level of noise generated by the operations is kept below the allowed limits, therefore no adverse noise impact would occur | • Employing good construction practices to minimise construction noise and the hours when the noise are generated  
• Installing silencers, locating equipment away from noise sensitive areas  
• Noise abatement measures taken for pumps, motors and high pressure equipment. | • No noise impacts during construction or operation are envisaged, provided noise limits are adhered to. |
### Waste
- A qualitative assessment of the potential environmental impacts associated with the handling and disposal of waste generated during construction and operation has been undertaken

### Wastewater
- Discharge of process effluents will be managed and pre-treated in order to comply with the Standards for Industrial Effluent Discharge in Sewer
  - Ensuring that properly designed systems are put in place to manage and collect rainwater runoff
  - Installing screens, neutralisation systems and settling tanks for process effluents
  - Proper storage and handling of chemicals to eliminate risks of spills and leaks
  - Optimization of process (low liquor ratio), to reduce the amount of water used
  - Installation of heat exchanger to decrease the temperature of process effluent

### Traffic
- A quantitative assessment was undertaken to assess the potential impact of construction traffic. This indicated that the impact of an estimated 15 additional vehicles (vans, lorries) per day traveling
  - Where feasible and practical, transportation of construction materials will be done off-peaks hours.

### Summary and Conclusion
- Employing good waste management practices during construction and operation of the dye house
- No residual impacts anticipated

- No adverse impacts are expected with the implementation of the mitigation measures.

- Less residual impact due to elimination of vehicular flow during operational phase
to and from the project site would not have a major impact on the nearby roads.

- A quantitative assessment was also undertaken to assess the potential impact of operation traffic. The proposed setting up of the dye house at La Tour Koenig will eliminate the vehicular to and from (deliveries, visitors, maintenance, etc) Le Hochet.

| Landscape and visual | An assessment was undertaken to consider the potential visual impact of the dye house. Overall the potential visual disturbance will be minimal as the building will be constructed harmoniously with other existing buildings. | Ensuring same colour of building as per existing buildings
| | | Planting of trees and providing green spaces
| Hazards during operation | An assessment was undertaken to consider potential impacts or effects of any hazard that may occur during operation with regard to fuel and consumables. | Necessary control measures taken during delivery, storage and transfer to equipment of fuel and consumables.
| | | Emergency preparedness and response plans are in place
| | | Negligible to slight residual impacts associated with the stack |
9.2 Overall positive impact

9.2.1 Social and Economic issues

A review of the potential social and economic issues associated with the dye house indicates that:

- The proposed dye house will not cause any conflict with other existing or future land uses as it is located in the premises of RT Knits Ltd at La Tour Koenig which is an Industrial Zone.
- Visual disturbance associated with the dye house will be negligible for the building (10 m high) and moderate for the 15 m stack.
- Pollutant emissions from the boiler are not predicted to have a significant adverse effect to the environment and human health.
- Bad neighbourhood complaints due to noise will stop at current dye house at Le Hochet, as most of the houses were less than 50 m far away.
- The Health and Safety of those working in the dye house will be carefully managed by adopting Health and Safety Policy, Operational and Maintenance Policy and procedures consistent with norms.

9.2.2 Socio-economic benefits

The potential socio-economic benefits associated with the setting of the dye house include:

- The proposed project will further enhance the image of the surrounding area, creating direct and indirect employment opportunities, and have social benefits for employees working for the firm as well as inhabitants of the surrounding area.
- Optimum use of land in the existing premises at La Tour Koenig. A masterplan had been issued prior to construction in the Industrial Zone to make sure that process flows are as efficient as possible.
- It is in line with the Government’s development policy in regard to the boosting of the textile sector and promoting the “Maurice-Ile Durable” vision.
- It is expected to increase Foreign Direct Investment.
- The proposed site location avoids potential environmentally sensitive areas.
Further consultation activities will be planned with the key public sector stakeholders after the submission of the EIA Report to the Ministry and Department of Environment in accordance with regulatory requirements.

### 9.3 Overall Conclusion

The setting up of the dye house for RT Knits Ltd at La Tour Koenig will not conflict with other in-house departments in the neighbourhood. On the contrary, it will integrate the existing product flow of the textile factory. In doing so, there will be no vehicular movement to and from the factory thereby reducing the overall carbon footprint of the company.

Setting up a state-of-the-art dye house will provide better lead time, offer the opportunity to decrease consumption of utilities per kg of fabric but also increase overall production capacity. RT Knits Ltd is also planning to develop and manufacture new products to provide a competitive edge with regards to such countries as Bangladesh or China, where the price of resources are relatively cheaper. All those factors combined will assist RT Knits Ltd in achieving its target of reducing its water and carbon footprints. Therefore, associated costs will decrease, also allowing the company to offer more competitive products.

This EIA Report has reviewed the potential environmental impacts for setting up a dye house at La Tour Koenig. It concludes that, with the adoption of best practice during construction and operation, optimized processes, more efficient equipment and the mitigation measures outlined in the report, there is no doubt that the environmental impact associated with the project will be kept to a minimum.