Harris Paints
Guyana Production Project Summary
May 2024

Harris Paints Guyana Limited, of 10-13 Water Street, North Cummingsburg, Guyana, proposes to establish a decorative paint production facility at an already constructed building on Lot 30 Beterverwagting, East Coast Demerara, Guyana.

Harris Paints Guyana contacts are Ayeodele Knights and Marguerite Desir, with respective emails Ayeodele.knights@harrispaintsonline.com and Marguerite.desir@harrispaintsonline.com , or may be called at 592-640-8383.

'The Harris Paints BV Project', or 'the project', will have two main phases. First, installation and commissioning, which is expected to begin in March and end in August, and second, the ongoing safe operation of the paint manufacturing site.

Land area is 25,000 square feet. The building floor area is approximately 10,000 square feet, separated into two floors. The ground floor is elevated and will have the manufacturing, warehousing, and retail areas, while the second floor will have administrative offices.

As shown in Appendix A, the site is bordered to the West by a public road across which are buildings used by ANSA McAL, to the South by a building used by Rock Hard Cement, to the North by an open lot, and to the East by ACTLabs.

Appendix A provides an overview of the physical location, while the table below, to the best of our research, assuages community concerns.

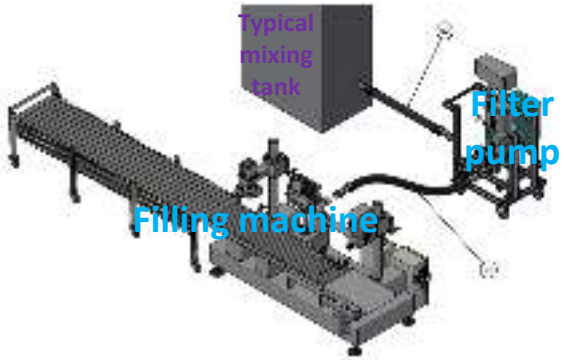
	50m-100m	501m-1000m	>1km
Sensitive ecosystems e.g. Wetlands/Mangroves		X	
Protected Areas			X
Major Water Courses			X
Threatened or endangered flora and fauna			X
Residences	X		
Place of Worship			X
Schools			X
Hospitals			X
River / Sea Defence		X	

The project will invest ~970,000 USD in new equipment during the first phase of the project. The second phase of the project will add ~500,000 USD to Harris Paints Guyana's existing operating expenses, in support of their growth projections to a total turnover of ~4,000,000 USD. The project will add ~10 people to Harris Paints Guyana's current staff compliment.

The site and building are already constructed in full compliance by the landlord. Our project is to outfit the building with equipment necessary to store raw material for the production of decorative paint, manufacture decorative paint, and store finished paint products.

Production of decorative paint and texture requires the selection of precisely weighed units of dry powders and liquids, dosing of same in the prescribed sequence and method into metal tanks/vessels, mixing at the prescribed speeds and duration, and filling into plastic or metal packaging. There are multiple quality control checks during the process. The final product will be packaged in 1 quart, 1 gallons, and 5 gallons appropriately labeled plastic or metal containers. Maximum output is expected at 240,000 gallons a year. The following slide plus appendices B, C, and D map this process.

The Production process starts with **Raw Material Selection**, then **Mixing** (sometimes called Dosing), then **Filling**, and finally the **Finished Good** is placed in the warehouse.



Primary power to the project will be from the public grid. The production system will also be supported by a backup 341kw diesel power. The generator will provide power to all processes in the building. (see Appendix E for location). Paint production equipment can be expected to create 80Db at 3 meters for approximately 3 hours per day but noise will be mostly contained within the building. The diesel generator, when in use, can be expected to produce 75Db at 3 metres, but will be contained in a baffled enclosure, and exhaust at roof height. Staff will be issued with suitable PPE.

Empty raw material packaging (corrugated cardboard, and bags) is expected to be 26,000 lb dry material per year and utilize an EPA authorized contractor to remove non-hazardous dry waste in a waste skip. Every reduce/reuse/recycle effort is made to ensure the waste is limited to the volumes above. See Appendix E for examples of dry packaging waste.

As much as possible rainwater will be harvested and stored on-site for use as a raw material in the production of paint, as much as 48,000 gallons a year will be used.

gallons a year. Wastewater will be flocculated to separate particles from clear water. The portion of the treated water, now clear, will be reused in future cleaning cycles. The portion of treated water that is not reused in future cleaning cycles will be tested an adjusted (e.g. ph) to allow for disposal using an EPA authorized contractor. Remaining particulate residue is expected to be ~1,000 lb dry material per year. See Appendix F for the layout of our water storage and treatment equipment.

The working internal areas of the building are elevated 4” above ground to minimize risk from flooding. Liquid and solid waste is treated as per previously described. Noise is not expected to exceed ambient noise of neighboring activities and Harris Paints’ staff will be issued with PPE when appropriate.

The project will improve Guyana’s resilience to external supply chain issues affecting decorative paint, add employment, broaden local skill sets, provide exposure to more employees to the global paint market, and do so with the goal of creating as little waste as possible.

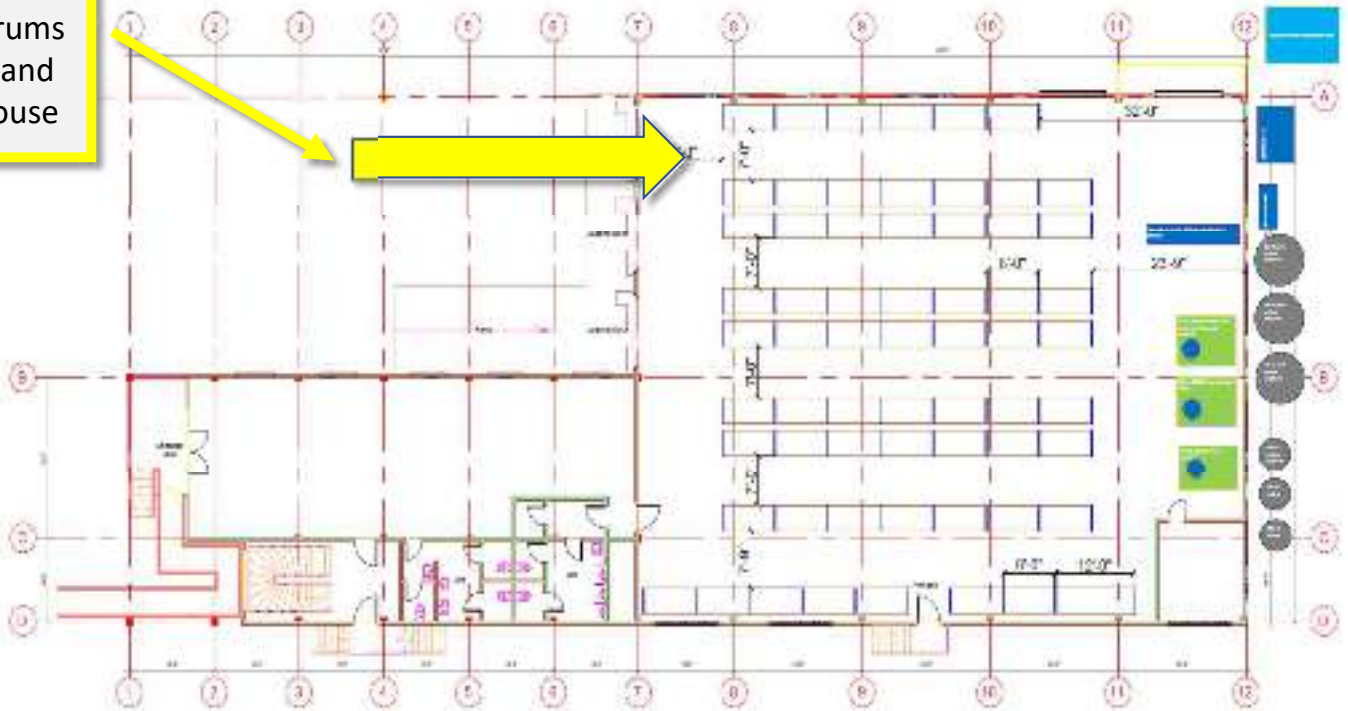
Appendix A

Water course

https://maps.app.goo.gl/Bo6dX2jakfaLA4Xb7

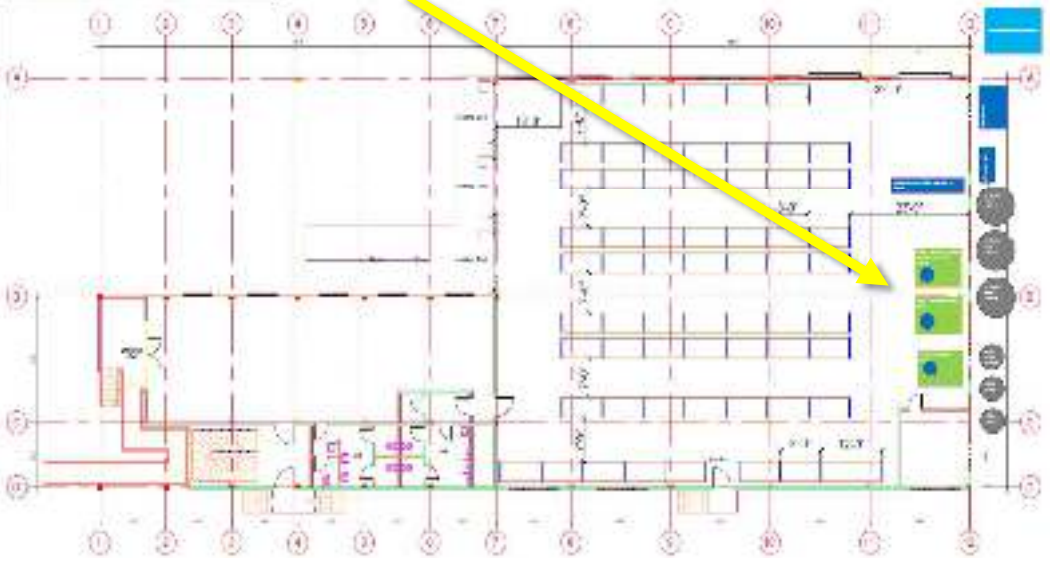
Appendix B

Liquid and powder raw material, stored in drums and bags, imported and stored in the warehouse

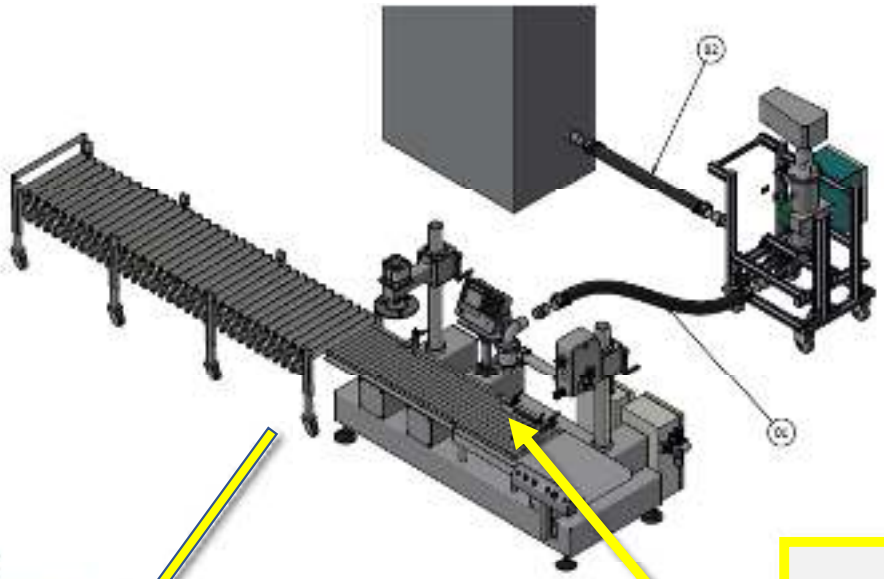


Appendix C

Liquid and powder raw material, processed into paint, using three pieces of dispersing equipment (pictured left), and metal tanks up to 1000 gallon capacity each



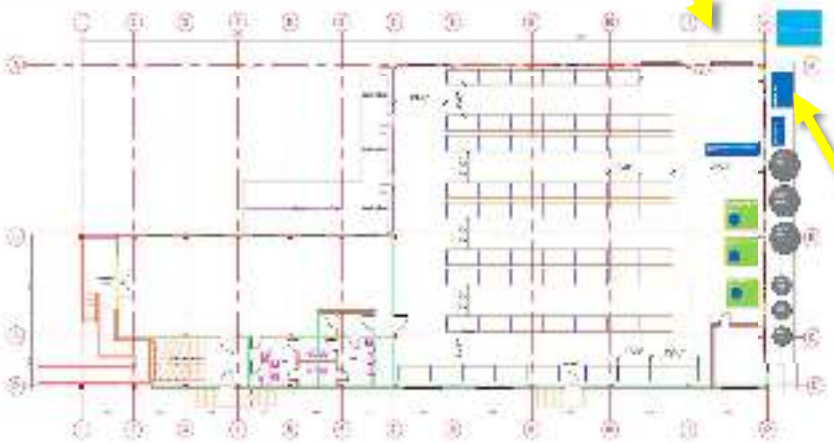
Appendix D



Paint, filled on site by a filling machine (pictured above) into metal or plastic packaging, which is then stored awaiting delivery to the customers.

Appendix E

Empty plastic and metal drums, that previously contained non-hazardous items, are reused by other industries. Empty paper-based packaging and plastic bags are disposed of to comply with local legislation.



Diesel backup power generator

Appendix F

From a processing and manufacturing point of view, the production of water–based paints are in principle a blending and filling process, using specialized equipment to achieve the required level of refinement of some of the raw materials and the required paint quality. No heavy metal compounds are used in water-based paint production within the Harris Group.

Any wastewater generated is as a result of washing and cleaning of the equipment. Some of this wash water is re-used directly into the making of additional paint or is treated by flocculation and filtration to remove any suspended solids. The remaining clear water is either stored and reused for cleaning or paint making.

Chemical Treatment of wash water at the Harris Group of Companies.

Step 1. Wash water is stored in large holding tank(s) of roughly 250G for subsequent treatment.

Step 2. An acid solution of ferric sulfate (F201) is added gradually to 200 gallons of wash water while stirring, until the pH of the mix stabilizes in the range of 3.5 - 4.0.

Step 3. High calcium hydrated lime (calcium hydroxide) is then added to mix to raise the pH to 8.5 - 8.7 to cause flocculation of the solid.

Step 4. Approximately 8 – 10 lbs. of Alar 101 (dioctahedral smectite) are then added to mix to cause sedimentation of the solids.

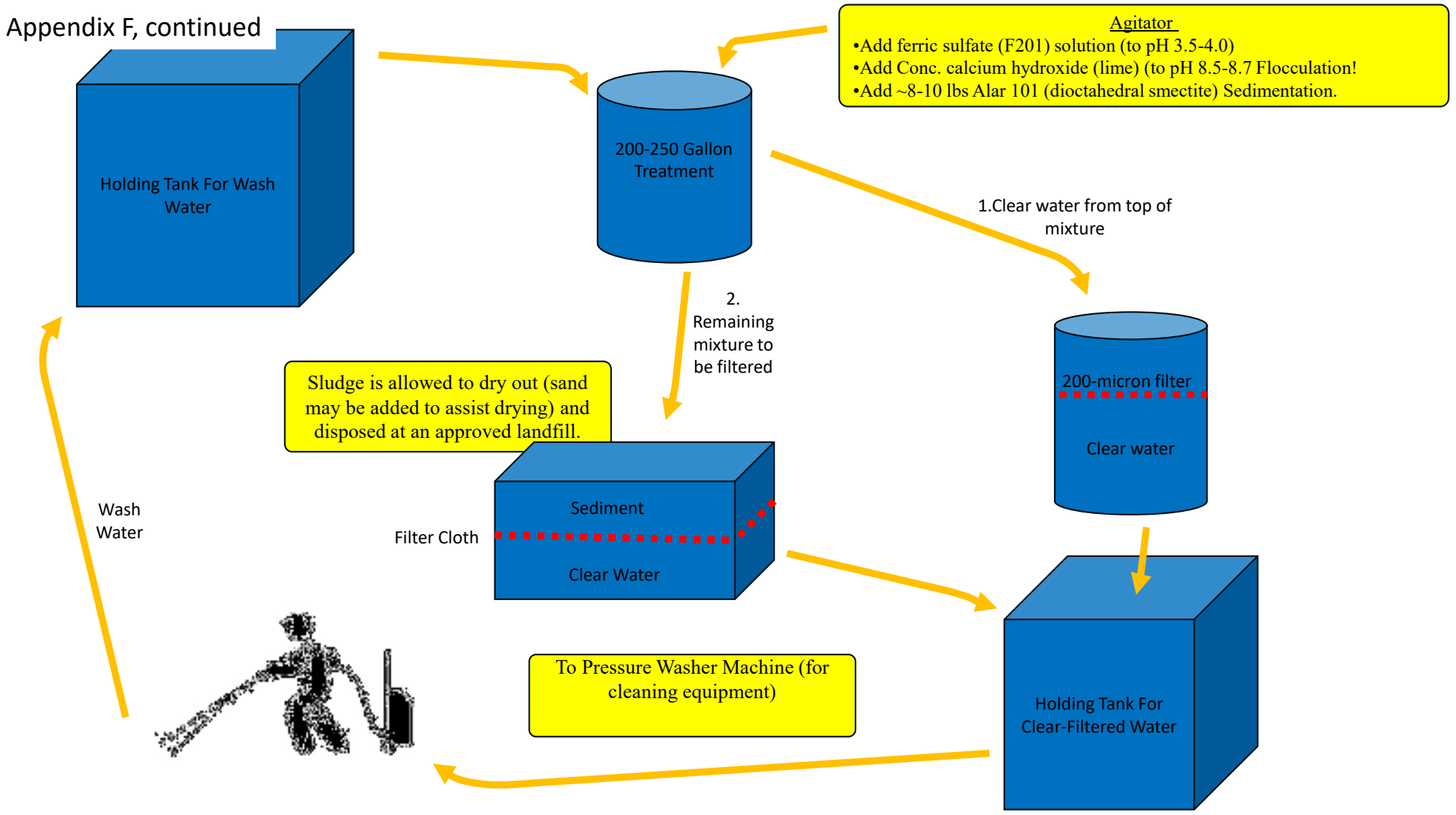
Step 5. The clear water at the top of mixture is filtered through a 200-micron filter and then the remaining mixture is strained through a filter cloth to separate the remaining clear water from the sludge.

Step 6. The sludge is allowed to dry and then disposed using an EPA authorized contractor.

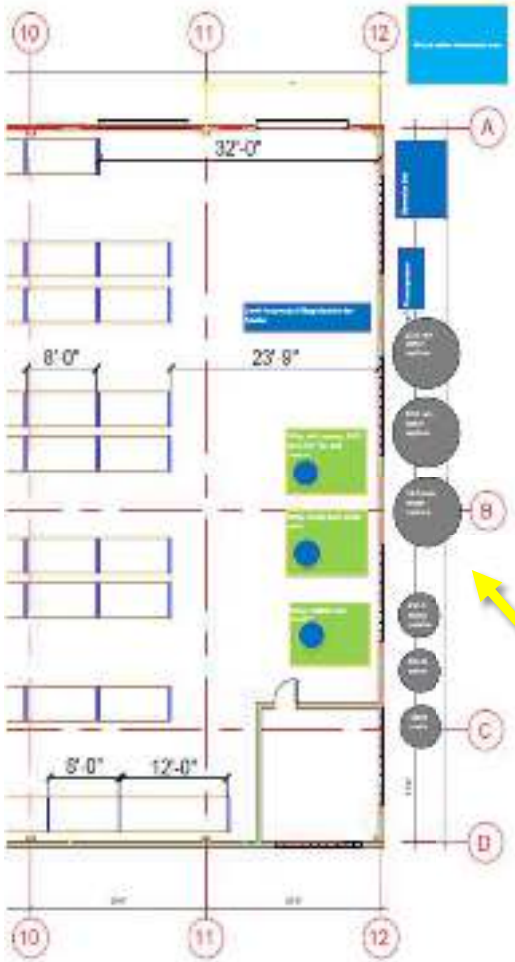
Step 7. The pH of the clear water is checked (to be in the range of pH 7- 8) and is then stored for re-use for washing and cleaning.

If excessive volume of clear, treated water arise, this is removed from the plant by EPA approved contractors for disposal at approved locations only.

Appendix F, continued



Appendix F, continued



Water used in the cleaning process is flocculated and reused in the cleaning process. Solid material remaining from the flocculation process is dried and disposed of to comply with local legislation.

Rainwater and water from public main, will be stored in sufficient volumes to buffer our production process for one week.