

CONTENTS

1. INTRODUCTION..... 1

1.1 Request for Permitting 1

1.2 Overview of Application 1

2. FACILITY DESCRIPTION 3

2.1 GLASSMAKING PROCESS OVERVIEW 3

2.2 Sources of Air Emissions 3

2.2.1 Batch House: Raw Material Handling and Batch Preparation 4

2.2.2 Regenerative Glass-Melting Furnace 5

2.2.3 Forehearths 7

2.2.4 Hot End Coaters 7

2.2.5 Mold Preheaters..... 7

2.2.6 Annealing Lehrs 7

2.2.7 Cold End Coating Units 7

2.2.8 Emergency Generators 7

2.2.9 Process Water Cooling and Cooling Towers 7

3. PROJECT EMISSIONS ESTIMATES 9

3.1 Emissions per Regulated Air Pollutant..... 9

3.1.1 Criteria Pollutants..... 9

3.1.2 Hazardous Air Pollutants 9

3.1.3 Greenhouse Gases..... 9

3.2 Emissions per Emission Unit 9

3.2.1 Batch House 9

3.2.2 Furnace..... 9

3.2.3 Forehearths 10

3.2.4 Hot End Coaters 10

3.2.5 Mold Preheaters..... 10

3.2.6 Lehrs..... 10

3.2.7 Cold End Coaters..... 10

3.2.8 Emergency Engines..... 11

3.2.9 Process Water Cooling and Water Cooling Towers..... 11

4. REGULATORY REQUIREMENTS 12

4.1 Prevention Of Significant Deterioration (PSD) And Title V Major Source 12

4.2 New Source Performance Standards 12

4.2.1 Standards Of Performance for Glass Manufacturing Plants (40 CFR 60 Subpart CC) 12

4.2.2 Standards Of Performance for Stationary Compression Ignition Internal Combustion Engines (40 CFR 60 Subpart IIII)..... 13

4.3 National Emission Standards for Hazardous Air Pollutants 13

4.3.1 National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (40 CFR 63 Subpart ZZZZ) 13

4.3.2 National Emission Standards for Hazardous Air Pollutants for Glass Manufacturing Area Sources (40 CFR 63 Subpart SSSSSS)..... 13

4.4 Georgia State Regulation Requirements 13

5. AIR TOXICS ANALYSIS 15

5.1 Model Selection 15

5.2 Model Processing Options 16

5.3 Project-Specific Parameters 16

5.3.1 Dispersion Coefficients 16

5.3.2 Meteorological Data 16

5.3.3 Surface Characteristics 16

5.3.4 Receptors 17