Ref	Assessment Criteria:	Scale	Calculated/Scored	Formula	Red	Amber
A	Opportunity for improvement	1 to 3	Scored	N/A	3	2
B	Relative consumption	1 to 3	Scored	N/A	3	2
C	Significance Rating	1 to 9	Calculated	A*B	6, 9	4

Yellow
1
1
1, 2, 3

Energy Sources	Energy Uses													Scoring Category
	Air Conditioning	Lighting (internal)	Lighting (external)	Small Power/IT	Steam Generation	Gas Turbines	Plant Equipment	Compressed air	Back-up generation	Space Heating	Hot Water	Forklifts	Telehandlers	
Electricity	0	1	0	1	0	0	2	1	0	0	0	1	0	Opportunity for improvement
	0	2	0	1	0	0	3	1	0	0	0	1	0	Relative consumption
	0	**2**	**0**	**1**	**0**	**0**	**6**	**1**	**0**	**0**	**0**	**1**	**0**	**Significance Rating**
Gas	0	0	0	0	0	0	0	0	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
Steam	0	0	0	0	0	0	0	1	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	2	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
Diesel	0	0	0	0	0	0	0	0	1	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	1	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**Significance Rating**
LPG	0	0	0	0	0	0	0	0	0	0	0	1	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	0	0	0	1	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**Significance Rating**

Energy Sources	Energy Uses													Scoring Category
	Air Conditioning	Lighting (internal)	Lighting (external)	Small Power/IT	Steam Generation	Gas Turbines	Plant Equipment	Compressed air	Back-up generation	Space Heating	Hot Water	Forklifts	Telehandlers	
Electricity	0	2	1	1	0	0	1	1	0	0	0	0	0	Opportunity for improvement
	0	1	1	1	0	0	3	1	0	0	0	0	0	Relative consumption
	0	**2**	**1**	**1**	**0**	**0**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
Gas	0	0	0	0	0	0	0	0	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
Steam	0	0	0	0	0	0	2	1	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	2	2	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**4**	**2**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
Diesel	0	0	0	0	0	0	0	0	1	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	1	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**Significance Rating**
LPG	0	0	0	0	0	0	0	0	0	0	0	1	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	0	0	0	1	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**Significance Rating**

Energy Sources	Energy Uses													Scoring Category
	Air Conditioning	Lighting (internal)	Lighting (external)	Small Power/IT	Steam Generation	Gas Turbines	Plant Equipment	Compressed air	Back-up generation	Space Heating	Hot Water	Forklifts	Telehandlers	
Electricity	0	1	1	1	0	0	1	1	0	0	0	0	0	Opportunity for improvement
	0	1	1	1	0	0	3	1	0	0	0	0	0	Relative consumption
	0	**1**	**1**	**1**	**0**	**0**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
Gas	0	0	0	0	0	0	0	0	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
Steam	0	0	0	0	0	0	2	1	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	1	1	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
Diesel	0	0	0	0	0	0	0	0	1	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	1	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**Significance Rating**
LPG	0	0	0	0	0	0	0	0	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**

	Energy Uses	

Energy Sources	Energy Uses													Scoring Category
	Air Conditioning	Lighting (internal)	Lighting (external)	Small Power/IT	Steam Generation	Gas Turbines	Plant Equipment	Compressed air	Back-up generation	Space Heating	Hot Water	Forklifts	Telehandlers	
Electricity	0	1	1	1	0	0	1	1	0	0	0	0	0	Opportunity for improvement
	0	1	1	1	0	0	2	1	0	0	0	0	0	Relative consumption
	0	**1**	**1**	**1**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
Gas	0	0	0	0	0	0	0	0	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
Steam	0	0	0	0	0	0	2	1	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	2	1	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**4**	**1**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
Diesel	0	0	0	0	0	0	0	0	1	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	1	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**Significance Rating**
LPG	0	0	0	0	0	0	0	0	0	0	0	1	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	0	0	0	1	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**Significance Rating**

	Energy Uses	

Energy Sources	Energy Uses													Scoring Category
	Air Conditioning	Lighting (internal)	Lighting (external)	Small Power/IT	Steam Generation	Gas Turbines	Plant Equipment	Compressed air	Back-up generation	Space Heating	Hot Water	Forklifts	Telehandlers	
Electricity	0	0	1	1	0	0	1	1	0	0	0	0	0	Opportunity for improvement
	0	0	1	1	0	0	2	1	0	0	0	0	0	Relative consumption
	0	**0**	**1**	**1**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
Gas	0	0	0	0	0	0	0	0	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
Steam	0	0	0	0	0	0	1	1	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	3	1	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
Diesel	0	0	0	0	0	0	0	0	1	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	1	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**Significance Rating**
LPG	0	0	0	0	0	0	0	0	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**

	Energy Uses	

Energy Sources	Energy Uses													Scoring Category
	Air Conditioning	Lighting (internal)	Lighting (external)	Small Power/IT	Steam Generation	Gas Turbines	Plant Equipment	Compressed air	Back-up generation	Space Heating	Hot Water	Forklifts	Telehandlers	
Electricity	0	1	1	1	0	0	1	1	0	0	0	0	0	Opportunity for improvement
	0	1	1	1	0	0	3	1	0	0	0	0	0	Relative consumption
	0	**1**	**1**	**1**	**0**	**0**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
Gas	0	0	0	0	0	0	0	0	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
Steam	0	0	0	0	0	0	1	1	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	1	1	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
Diesel	0	0	0	0	0	0	0	0	1	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	1	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**Significance Rating**
LPG	0	0	0	0	0	0	0	0	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**

	Energy Uses	

Energy Sources	Energy Uses													Scoring Category
	Air Conditioning	Lighting (internal)	Lighting (external)	Small Power/IT	Steam Generation	Gas Turbines	Plant Equipment	Compressed air	Back-up generation	Space Heating	Hot Water	Forklifts	Telehandlers	
Electricity	0	0	2	0	0	0	0	0	0	0	0	0	0	Opportunity for improvement
	0	0	1	0	0	0	0	0	0	0	0	0	0	Relative consumption
	0	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
Gas	0	0	0	0	0	0	0	0	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
Steam	0	0	0	0	0	0	0	0	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
LPG	0	0	0	0	0	0	0	0	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**

	Energy Uses	

Energy Sources	Energy Uses													Scoring Category
	Air Conditioning	Lighting (internal)	Lighting (external)	Small Power/IT	Steam Generation	Gas Turbines	Plant Equipment	Compressed air	Back-up generation	Space Heating	Hot Water	Forklifts	Telehandlers	
Electricity	0	1	1	1	0	0	1	1	0	0	0	0	0	Opportunity for improvement
	0	1	1	1	0	0	1	1	0	0	0	0	0	Relative consumption
	0	**1**	**1**	**1**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
Gas	0	0	0	0	0	0	0	0	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
Steam	0	0	0	0	0	0	0	1	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	1	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
LPG	0	0	0	0	0	0	0	0	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**

	Energy Uses	

Energy Sources	Energy Uses													Scoring Category
	Air Conditioning	Lighting (internal)	Lighting (external)	Small Power/IT	Steam Generation	Gas Turbines	Plant Equipment	Compressed air	Back-up generation	Space Heating	Hot Water	Forklifts	Telehandlers	
Electricity	0	0	1	1	0	0	1	1	0	0	0	0	0	Opportunity for improvement
	0	0	2	1	0	0	1	1	0	0	0	0	0	Relative consumption
	0	**0**	**2**	**1**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
Gas	0	0	0	0	0	0	2	0	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	1	0	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
Steam	0	0	0	0	0	0	0	1	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	1	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
Diesel	0	0	0	0	0	0	0	0	1	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	1	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**Significance Rating**
LPG	0	0	0	0	0	0	0	0	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**

	Energy Uses	

Energy Sources	Energy Uses													Scoring Category
	Air Conditioning	Lighting (internal)	Lighting (external)	Small Power/IT	Steam Generation	Gas Turbines	Plant Equipment	Compressed air	Back-up generation	Space Heating	Hot Water	Forklifts	Telehandlers	
Electricity	1	1	1	1	0	0	1	1	0	0	0	0	0	Opportunity for improvement
	1	1	1	1	0	0	1	1	0	0	0	0	0	Relative consumption
	1	**1**	**1**	**1**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
Gas	0	0	0	0	1	1	0	0	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	3	3	0	0	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**3**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
Steam	0	0	0	0	0	0	0	1	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	1	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
Diesel	0	0	0	0	0	0	0	0	1	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	1	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**Significance Rating**
LPG	0	0	0	0	0	0	1	0	0	0	0	1	1	Opportunity for improvement
	0	0	0	0	0	0	1	0	0	0	0	1	1	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**1**	**Significance Rating**

	Energy Uses	

Energy Sources	Energy Uses													Scoring Category
	Air Conditioning	Lighting (internal)	Lighting (external)	Small Power/IT	Steam Generation	Gas Turbines	Plant Equipment	Compressed air	Back-up generation	Space Heating	Hot Water	Forklifts	Telehandlers	
Electricity	0	0	0	0	0	0	0	0	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
Gas	0	0	0	0	0	0	0	0	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
Steam	0	0	0	0	0	0	0	0	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
Diesel	0	0	0	0	0	0	2	0	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	2	0	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
LPG	0	0	0	0	0	0	0	0	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**

	Energy Uses	

Energy Sources	Energy Uses													Scoring Category
	Air Conditioning	Lighting (internal)	Lighting (external)	Small Power/IT	Steam Generation	Gas Turbines	Plant Equipment	Compressed air	Back-up generation	Space Heating	Hot Water	Forklifts	Telehandlers	
Electricity	0	1	1	1	0	0	1	1	0	0	0	0	0	Opportunity for improvement
	0	1	1	1	0	0	1	1	0	0	0	0	0	Relative consumption
	0	**1**	**1**	**1**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
Gas	0	0	0	0	0	0	0	0	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
Steam	0	0	0	0	0	0	0	1	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	1	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
Diesel	0	0	0	0	0	0	0	0	0	0	0	1	1	Opportunity for improvement
	0	0	0	0	0	0	0	0	0	0	0	1	1	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**Significance Rating**
LPG	0	0	0	0	0	0	0	0	0	0	0	2	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	0	0	0	1	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**Significance Rating**

	Energy Uses	

Energy Sources	Energy Uses													Scoring Category
	Air Conditioning	Lighting (internal)	Lighting (external)	Small Power/IT	Steam Generation	Gas Turbines	Plant Equipment	Compressed air	Back-up generation	Space Heating	Hot Water	Forklifts	Telehandlers	
Electricity	1	1	1	1	0	0	0	0	0	0	0	0	0	Opportunity for improvement
	1	1	1	1	0	0	0	0	0	0	0	0	0	Relative consumption
	1	**1**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
Gas	0	0	0	0	0	0	0	0	0	1	1	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	0	1	1	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**Significance Rating**
Steam	0	0	0	0	0	0	0	0	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
LPG	0	0	0	0	0	0	0	0	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**

	Energy Uses	

Energy Sources	Energy Uses													Scoring Category
	Air Conditioning	Lighting (internal)	Lighting (external)	Small Power/IT	Steam Generation	Gas Turbines	Plant Equipment	Compressed air	Back-up generation	Space Heating	Hot Water	Forklifts	Telehandlers	
Electricity	0	1	1	1	0	0	1	1	0	0	0	0	0	Opportunity for improvement
	0	1	1	1	0	0	1	1	0	0	0	0	0	Relative consumption
	0	**1**	**1**	**1**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
Gas	0	0	0	0	0	0	0	0	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
Steam	0	0	0	0	0	0	0	1	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	1	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
Diesel	0	0	0	0	0	0	0	0	0	0	0	0	1	Opportunity for improvement
	0	0	0	0	0	0	0	0	0	0	0	0	1	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**Significance Rating**
LPG	0	0	0	0	0	0	0	0	0	0	0	1	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	0	0	0	1	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**Significance Rating**

	Energy Uses	

Energy Sources	Energy Uses													Scoring Category
	Air Conditioning	Lighting (internal)	Lighting (external)	Small Power/IT	Steam Generation	Gas Turbines	Plant Equipment	Compressed air	Back-up generation	Space Heating	Hot Water	Forklifts	Telehandlers	
Electricity	1	1	1	1	0	0	1	0	1	0	0	0	0	Opportunity for improvement
	1	1	1	1	0	0	1	0	1	0	0	0	0	Relative consumption
	1	**1**	**1**	**1**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**Significance Rating**
Gas	0	0	0	0	0	0	0	0	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
Steam	0	0	0	0	0	0	0	0	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**
LPG	0	0	0	0	0	0	0	0	0	0	0	0	0	Opportunity for improvement
	0	0	0	0	0	0	0	0	0	0	0	0	0	Relative consumption
	0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**Significance Rating**

	Energy Uses	

Energy Source	Energy Use	Area
Electricity	Plant Equipment	Dry Mill

SEDAMYL	Register	Number: SED ER-002	Page: 1 of 2
	Energy Performance Indicators	Current Issue date: 28/07/2020	Rev: 2
		Previous Issue date: 04/02/2020	Rev: 1
		Original Issue date: 12/02/2018	Rev: 0

Energy Performance Indicator (EnPI)					Scope of EnPI	
	Data Source	Timing & Frequency	Electricity	Gas	Steam	Recovered Heat
Gas Consumption MWh (absolute)	Meter Reading	Read Daily & Recorded Monthly		✓		
Gross Energy Consumption kWh per tonne of wheat processed (gas consumption + electricity purchased - electricity sold)	Calculation	Monthly	✓	✓		
Steam Consumption MWh (absolute)	Meter Reading & Calculation	Read Daily & Recorded Monthly			✓	
Steam Consumption kWh per tonne of wheat processed	Calculation	Monthly			✓	
Electricity Produced MWh (absolute)	Meter Reading	Read Daily & Recorded Monthly	✓			
Electricity Produced kWh per tonne of wheat processed	Calculation	Monthly	✓			
Electricity Consumption MWh (absolute)	Meter Reading	Read Daily & Recorded Monthly	✓			
Electricity Consumption kWh per tonne of wheat processed	Calculated	Monthly	✓			
Electricity Sold MWh (absolute)	Meter Reading	Read Daily & Recorded Monthly	✓			
Electricity Sold kWh per tonne of wheat processed	Calculation	Monthly	✓			
Electricity Purchased MWh (absolute)	Meter Reading	Read Daily & Recorded Monthly	✓			
Electricity Purchased kWh per tonne of wheat processed	Calculation	Monthly	✓			

Energy Performance Indicator (EnPI)					Scope of EnPI	
	Data Source	Timing & Frequency	Electricity	Gas	Steam	Recovered Heat
Electrical Efficiency of Gas Turbines (%)	**Calculation**	**Monthly**	✓	✓		
Global Energy Efficiency of CHP Plant (%)	**Calculation**	**Monthly**	✓	✓	✓	
Heat Recovery from Boiler 9 Exhaust MWh (absolute)	**Calculation**	**Monthly**				✓
Heat Recovery from Boiler 10 Exhaust MWh (absolute)	**Calculation**	**Monthly**				✓
Total Heat Recovery MWh (Boiler 9 + Boiler 10)	**Calculation**	**Monthly**				✓

The above indicators are inputted into the FZABREP_Monthly CHP Generation workbook on a monthly basis by the Environmental and Energy Manager. Daily readings are taken and recorded by the Electrical Co-ordinator or Electricians.

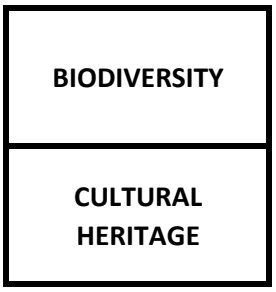
Data are analysed and evaluated by the Environmental and Energy Manager and Energy Committee via the six-monthly Energy Committee meetings.

rev.	date	notes
…	…	…
0	27/05/2016	
1	02/05/2017	alignment with ISO 14001:2015 standard
2	05/06/2018	Stacks updated on BOILER HOUSE_CHP, CIP update in FERMENTATION.
3	27/04/2019	General updates across the site, CHP developments with GT3 references.
4	07/01/2020	General revision

AREA	ASPECT	NORMAL	ABNORMAL / EMERGENCY	SEVERITY	CONTROL	RATING NUMBER	CONTROLS OR RESPONSIBILITY
DRYMILL	**USE OF ENERGY**	Use of electricity for fans, mills, compressors, blowers, conveyors, sievers, cleaning machines, lighting load shedding system.	N/A	4	3	12	Compressed air from Elliot turbine, leak detection alarms. Scada control on energy consumption.
DRYMILL	**ENVIRONMENTAL NUISANCE**	Noise from machinery and air movement.	Increased noise level due to machinery malfunction.	4	3	12	Silencers installed. EM regular noise surveys.
WETMILL & DRYERS	**DISCHARGES TO WATER**	Dilute starch and gluten to 160 TK1 via sump from floor washing, equipment washing, filter changes.	Dilute starch and gluten to WWTP via sump due to tank overflows Several incidents of internal severe overflow leading in some cases to external release of high COD material. Lack of knowledge of emergency diversion procedure	5	3	15	Sump to WWTP locked, always to 160 TK1 .Sump and WWTP with continuous monitoring and alarms. Provision of flood barriers. TOC analyzer in place. IBC bunds emptied. SED EWI-006
WETMILL & DRYERS	**ENVIRONMENTAL NUISANCE**	Noise generation from machinery and air movement Odour generation from process.	Increase noise levels due to equipment malfunction.	4	3	12	Insulated building, disintegrator contained within separate room . Deflector panels. Change of inverter motors.AM to add E logsheet to log regular noise checks of area
FERMENTATION	**EMISSION TO AIR**	Venting of carbon dioxide from scrubber system. Vapours from fermentors in CIP phase. Starch cooking heated vapour from chimney. CIP tank heated vapour from chimney. Condensate tank heated vapour from chimney.	VOC emissions due to scrubber failure. VOC emission due to fermentation tank foam over. Scrubber temperatures are not monitored closely. This can lead to un noticed performace drop.	4	3	12	Possible ethanol and congener escape. Currently no continuous monitoring of scrubber system only 12 monthly. Scrubber CIP.
FERMENTATION	**ENVIRONMENTAL NUISANCE**	Noise from steam, pumps and scrubber fan. Low level odours from fermentation process via scrubber system pipe and starch cooking.	Noise from worn machinery.	4	3	12	Noisy motors (especially 3000RPM) are replaced with low noise 1500RPM motors where possible, otherwise they are placed inside suppression boxes. Logsheet to log regular noise checks of area .
DISTILLERY	**ENVIRONMENTAL NUISANCE/ODOUR**	N/A	Odour from vacuum pump skid. Scrubber not working properly.	4	3	12	Scrubber facility periodical maintenance.
BOILER HOUSE/CHP	**USE OF ENERGY**	Gas for turbines (7.5 MW electrical GT2, 7.1 MW electrical GT3) and boilers (27 tonnes of steam per hour combined). Electricity used for pumps, fans, lighting, air conditioning etc. New Boiler 10 which decommisions the old Boiler 8. Boiler 7 and Boiler 9 in operation.	Gas, steam or hot water leaks would increase the required amounts of water/ natural gas.	5	3	15	Aged boiler 8 replace by new Boiler 10 (on recovery from GT3) . Regular servicing. Washing turbine regularly (during trips or service periods).
BOILER HOUSE/CHP	**ENVIRONMENTAL NUISANCE**	Noise from turbines and gas compressors.	N/A	4	3	12	Periodical Noise survey to keep record of noise conditions.
PROJECTS	**RELEASES TO LAND**	N/A	Run off of: cement, oils, fuels etc. escaping to land. Damage to ground via drilling/piling and .: creation of pollution pathways. Treatment of historically contaminated land.	5	3	15	Historically contaminated soil under treratment - currently only stored on plastic sheeting. Radioactivuty.

DRY MILL						
	OPERATING CONDITIONS					
ASPECT	**NORMAL**	**ABNORMAL / EMERGENCY**	**SEVERITY**	**CONTROL**	**RATING NUMBER**	**CONTROLS OR RESPONSIBILITY**
EMISSION TO AIR	Dust emission via 16 x emission points (vents, chimneys etc.)	Dust emission via explosion venting in the event of an explosion. Dust emission from filter failure.	4	1	4	Continuous monitoring, pre alarms, alarms, filter system, spark detection. Additionally all emission points are checked periodically by an MCERTS registered Monitoring company.
DISCHARGES TO WATER	N/A	Settling of dust particles beyond site boundary and being washed into waterways.	3	2	6	
RELEASES TO LAND	N/A	Settling of dust beyond site boundary.	2	2	4	
USE OF RAW MATERIALS	Large quantities of wheat for flour production. No chemicals are used in the process.	N/A	2	1	2	Routine site monitoring to identify any areas of loss. Also any minor spills can be reintroduced to the process where appropriate.
USE OF ENERGY	Use of electricity for fans, mills, compressors, blowers, conveyors, sievers, cleaning machines, lighting load shedding system.	N/A	4	3	12	Compressed air from Elliot turbine, leak detection alarms. Scada control on energy consumption.
USE OF WATER	Use of well water for wheat conditioning ($6m^3$/day).	Fire system water	2	1	2	Precise dosing of process water, spark detection and fire alarm system.
WASTE	Intake wheat cleaning (straw, chaff) for offsite composting (2 tonnes/week).	N/A	2	2	4	Composting.
ENVIRONMENTAL NUISANCE	Noise from machinery and air movement.	Increased noise level due to machinery malfunction.	4	3	12	Silencers installed. EM regular noise surveys.
BIODIVERSITY	N/A	Birds nesting in structures.	3	2	6	Doors closed, bird spikes
CULTURAL HERITAGE	N/A	N/A	1	1	1	

ASPECT
EMISSION TO AIR
DISCHARGES TO WATER
RELEASES TO LAND
USE OF RAW MATERIALS
USE OF ENERGY
USE OF WATER
WASTE
ENVIRONMENTAL NUISANCE


BIODIVERSITY
CULTURAL
HERITAGE

OPERATING CO
NORMAL
Water vapour emissions through gluten and starch dryer exhausts.
Dilute starch and gluten to 160 TK1 via sump from floor washing, equipment washing, filter changes.
N/A
Process additives (caustic soda, sodium hypochlorite, liquizyme,salts, calcium carbonate). Plastic bags.
Electricity for pumps, instruments, lighting, PLC, compressed air, steam and fan (motors).
1st pass RO water from borehole for production process. 1st pass RO water for washing equipment, cleaning floors etc.
IBCs (returned to suppliers for reuse).
Noise generation from machinery and air movement. Odour generation from process.

N/A
N/A

WET MILL and STARCH DRYER

)NDITIONS

ABNORMAL / EMERGENCY	SEVERITY	CONTROL
Dust emission due to bag filter failure. Dust emission due to explosion. Dust emission from silo due to filter failure.	4	2
Dilute starch and gluten to WWTP via sump due to tank overflows. Several incidents of internal severe overflow leading in some cases to external release of high COD material. Lack of knowledge of emergency diversion procedure.	5	3
Dust in case of bag filter failure.	3	1
N/A	3	2
N/A	4	2
Water from steam quench in gluten dryer in event of fire.	3	1
N/A	1	1
Increase noise levels due to equipment malfunction.	4	3

Birds nesting in structures.	3	1
N/A	1	1

RATING NUMBER	CONTROLS OR RESPONSIBILITY
8	IR spark detectors, suppression bottles, differential pressure sensors, moisture control
15	Sump to WWTP locked, always to 160 TK1 .Sump and WWTP with continuous monitoring and alarms. Provision of flood barriers. TOC analyzer in place. IBC bunds emptied. SED EWI-006
3	
6	Recycling of plastic bags. Skip dedicated.
8	Disintegrator does not have soft start. Compressed air leaks which are inaudible are undetected. Gluten dryer complete heat recovery. Heat recovery is under regular review to optimise heat usage.
3	Controlled dosing and water reused for condensate
1	
12	Insulated building, disintegrator contained within separate room . Deflector panels. Change of inverter motors.AM to add E logsheet to log regular noise checks of area


3
1

MVR C STARCH						
	OPERATING CONDITIONS					
ASPECT	**NORMAL**	**ABNORMAL / EMERGENCY**	**SEVERITY**	**CONTROL**	**RATING NUMBER**	**CONTROLS OR RESPONSIBILITY**
EMISSION TO AIR	Some small amount of incondensable and steam vapour is vented from the vacuum pump system in place on the MVR.	In the event that the vacuum system failed, causing the internal pressure of the MVR to rise above acceptable levels the pressure release device would open and vent steam and incondensable.	2	1	2	Stand-by vacuum pump, PLC monitoring and alarm system in place. Area continually monitored by operators and visible from control room.
DISCHARGES TO WATER	Some small amount of washing is generated on a weekly basis during planned cleaning, although this is a small amount. COD content liquids to WWTP.	Release of contaminated sump water to WWTP.	4	2	8	Pumps to the effluent tank which is continuosly monitored by the TOC meter: any hazardous material can be diverted to the concrete storage tank.
RELEASES TO LAND	N/A.	Spillage on the gravel because because of equipment failure.	4	1	4	Bunded area+ high level weirs installed.
USE OF RAW MATERIALS	Caustic Soda for CIP.	N/A.	1	1	1	Controlled usage by centralized system.
USE OF ENERGY	Electricity for pumps, instruments, lighting, PLC, compressed air, steam and fan (motors).	N/A	3	1	3	Compressed air from Elliot turbine, scada control on heat recovery preheating.
USE OF WATER	Use of treated borehole water (first pass RO) for process. Use of untreated borehole water for hoses and cleaning in place.	N/A	2	2	4	
WASTE	N/A	N/A	1	1	1	
ENVIRONMENTAL NUISANCE	Noise from steam. Pumps during normal operation.	Odour and noise from venting. Noise from worn machinery. Pump cavitation can occur during abnormal periods.	2	3	6	Steam use limited to start up following CIP. All pumps within structure to minimise noise.
BIODIVERSITY	N/A	Birds nesting in structures	1	3	3	Following trial at dry mill bird spikes could be implemented
CULTURAL HERITAGE	N/A	N/A	1	1	1	

FERMENTATION

	OPERATING CONDITIONS					
ASPECT	**NORMAL**	**ABNORMAL / EMERGENCY**	**SEVERITY**	**CONTROL**	**RATING NUMBER**	**CONTROLS OR RESPONSIBILITY**
EMISSION TO AIR	Venting of carbon dioxide from scrubber system. Vapours from fermentors in CIP phase. Starch cooking heated vapour from chimney. CIP tank heated vapour from chimney. Condensate tank heated vapour from chimney.	VOC emissions due to scrubber failure. VOC emission due to fermentation tank foam over. Scrubber temperatures are not monitored closely. This can lead to un noticed performace drop.	4	3	12	Possible ethanol and congener escape. Currently no continuous monitoring of scrubber system only 12 monthly. Scrubber CIP.
DISCHARGES TO WATER	Release of bund waters to WWTP. Discharge of cleaning effluent to WWTP.	Release of contaminated bund water to WWTP Scrubber overflow can occur due abnormal fermentation conditions. This can lead to discharge of high COD fermentation product to the fermentation sump and to WWTP (normally closed). There is the option to pump sump contents directly to drain, this valve is normally closed, transfer to drains only approved after testing following relevant procedure.	3	3	9	Currently on site containment requires manual valve change to divert effluent to concrete storage tank. Starches of other high COD material can adversely affect WWTP. Automatic pump and level sensors to drain scrubber tank before over flow. TOC analyzer before WWTP.
RELEASES TO LAND	No releases.	Leaks from transfer lines permeating through concrete membrane.	2	1	2	Any leaks should be quickly detected as lines run over busy operations areas. Also flow is monitored on PLC so any lost flow will alarm.
USE OF RAW MATERIALS	Use of chemicals (caustic soda, ammonium sulphate, diammonium phosphate, yeast, spirazyme, cellustar, sodium hypochlorite, acetic acid, bicarbonate of soda and descaler).	N/A	5	1	5	Relatively small quantities used. All stored in bund area in IBC or in 20kg bags.
USE OF ENERGY	Electricity for pumps, instruments, lighting, PLC, compressed air, steam and fan (motors). CIP tank heated up with hot condensates insteade use of steam.	N/A	3	2	6	
USE OF WATER	Use of treated borehole water (first pass RO) for process. Use of ozone borehole water for hoses and cleaning in place.	N/A	2	2	4	
WASTE	Packaging waste from chemicals (cardboard, plastics, pallets).	N/A	4	2	8	One skip, correct segregation in waste disposal.
ENVIRONMENTAL NUISANCE	Noise from steam, pumps and scrubber fan. Low level odours from fermentation process via scrubber system pipe and starch cooking.	Noise from worn machinery. Scrubber column dirty requires CIP	4	3	12	Noisy motors (especially 3000RPM) are replaced with low noise 1500RPM motors where possible, otherwise they are placed inside suppression boxes. Logsheet to log regular noise checks of area . Periodical CIP of the scrubber facility.
BIODIVERSITY	N/A	Birds nesting in structures.	1	3	3	Following dry mill trial bird spikes could be implemented.
CULTURAL HERITAGE	N/A	N/A	1	1	1	

DISTILLERY						
	OPERATING CONDITIONS					
ASPECT	**NORMAL**	**ABNORMAL / EMERGENCY**	**SEVERITY**	**CONTROL**	**RATING NUMBER**	**CONTROLS OR RESPONSIBILITY**
EMISSION TO AIR	No emissions .	Loss of power leading to ethanol vapour to air via pressure release valves. Leaks from compressed air lines.	3	3	9	Venting infrequent. 24/7 PLC control/alarms. Inspection and maintenance schedule in place according to pressure regulations. Operator training and competence.
DISCHARGES TO WATER	Release of rainfall waters to blue drains.	Release of contaminated bund water to blue drains. Release of contaminated fire water to blue drains. Release of foam to blue drains.	5	2	10	Area Manager and operators must be aware of emergency procedure to prevent uncontrolled release.
RELEASES TO LAND	No releases.	Leaks from alcohol transfer lines permeating through concrete membrane.	2	1	2	Most of the alcohol transfer lines traverse above the fermentation bund. Periodical control of the area trough Fesma on top of the daily routine controls.
USE OF RAW MATERIALS	N/A	N/A	1	1	1	
USE OF ENERGY	Electricity for pumps, instruments, lighting, PLC, compressed air, steam (motors).	N/A	3	3	9	Steam and Electricity consumptions run at constant levels.
USE OF WATER	Use of treated well water (second pass RO) for process. Use of well water for hoses.	Use of untreated borehole water for fire deluge system.	1	1	1	Water use metered .
WASTE	N/A	N/A	1	1	1	
ENVIRONMENTAL NUISANCE/NOISE	Noise from steam. Noise generated from normal operation of pumps.	Noise from worn machinery and occasional cavitation. Noise from steam trough relief valve on low pressure pipeline.	3	2	6	Regular greasing schedule to keep moving parts in order. Any parts (seals, bearings etc.) identified as damaged are replaced promptly to reduce noise but also because of their importance to the process.
ENVIRONMENTAL NUISANCE/ODOUR	N/A	Odour from vacuum pump skid. Scrubber not working properly requires CIP.	4	3	12	Scrubber facility periodical maintenance.
BIODIVERSITY	N/A	Birds nesting in structures.	1	3	3	Consider bird spikes for the future.
CULTURAL HERITAGE	N/A	N/A	1	1	1	

Review deluge system/ review and improve operating procedures and procedures specific to anti foam. Currently on site containment requires manual valve change to divert effluent to concrete storage tank. Consider a hardwired remote activation system for foam in order to prevent unnecessary discharge (last time accidental activation occurred due to broken ampule in detector system because of low temperature). Above action remains open however discussion with insurance company could make action not feasible. Repeat incident has not occured and procedures are now in place.

MVR						
	OPERATING CONDITIONS					
ASPECT	**NORMAL**	**ABNORMAL / EMERGENCY**	**SEVERITY**	**CONTROL**	**RATING NUMBER**	**CONTROLS OR RESPONSIBILITY**
EMISSION TO AIR	Some small amount of incondensable and steam vapour is vented from the vacuum pump system in place on the MVR.	In the event that the vacuum system failed, causing the internal pressure of the MVR to rise above acceptable levels the pressure release valve would open and vent steam and incondensable.	2	1	2	Stand-by vacuum pump, PLC monitoring and alarm system in place. Area continually monitored by operators and visible from control room.
DISCHARGES TO WATER	Some small amount of washing is generated on a weekly basis during planned cleaning, although this is a small amount.	Release of contaminated sump water to WWTP. A massive spillage	4	2	8	Sump pump is activated manually and pumps to the effluent tank which is continuosly monitored by the TOC meter: any hazardous material can be diverted to the concrete storage tank.
RELEASES TO LAND	N/A.	N/A.	1	1	1	Bunded area
USE OF RAW MATERIALS	Caustic Soda for CIP.	N/A.	1	1	1	Controlled usage by centralized system.
USE OF ENERGY	Electricity for pumps, instruments, lighting, PLC, compressed air, steam and fan (motors).	N/A	4	1	4	Compressed air from Elliot turbine, scada control on heat recovery preheating. Dedicated heat recovery loop for Dryer air preheating.
USE OF WATER	Use of treated borehole water (first pass RO) for process. Use of untreated borehole water for hoses and cleaning in place.	N/A	2	2	4	
WASTE	N/A	N/A	1	1	1	
ENVIRONMENTAL NUISANCE	Noise from steam. Pumps during normal operation	Odour and noise from venting. Noise from worn machinery . Pump cavitation can occur during abnormal periods .	2	3	6	Steam use limited to start up following CIP. All pumps within structure to minimise noise.
BIODIVERSITY	N/A	Birds nesting in structures.	1	3	3	Following trial at dry mill bird spikes could be implemented
CULTURAL HERITAGE	N/A	N/A	1	1	1	

TANK STORAGE						
	OPERATING CONDITIONS					
ASPECT	**NORMAL**	**ABNORMAL / EMERGENCY**	**SEVERITY**	**CONTROL**	**RATING NUMBER**	**CONTROLS OR RESPONSIBILITY**
EMISSION TO AIR	Air displacement from tank filling - VOC emissions.	N/A.	1	3	3	VOC emission due to displacement of alcohol vapour during tanker filling and storage tank filling. Additional control could be implemented (VOC capture/ tanker displacement)
DISCHARGES TO WATER	Release of bund waters to WWTP, rainfall to river drains	Release of contaminated bund water to WWTP (stillages). Release of contaminated fire water to WWTP (stillages). Release of foam to WWTP. Release of contaminated water to river drains.	4	2	8	Storage tanks contain high COD material and are controlled via PLC alarm, so overfilling is unlikely. Currently on site containment for larger losses, requires manual valve change to divert effluent to concrete storage tank.
RELEASES TO LAND	N/A.	Potential for bund contents to permeate and/or leak to ground due to failures in bund integrity (cracks).	2	1	2	Confirm bund inspection are taking place.
USE OF RAW MATERIALS	N/A.	N/A.	1	1	1	
USE OF ENERGY	Electricity for lighting and motors for pumps.	N/A.	2	2	4	Automatic motion sensing lights and timers implemented to improve energy consumption.
USE OF WATER	Use of treated borehole water (first pass RO) for process. Use of ozone water for hoses.	Use of ozone water for fire deluge system.	1	2	2	
WASTE	N/A.	N/A.	1	1	1	
ENVIRONMENTAL NUISANCE	N/A.	N/A.	1	1	1	
BIODIVERSITY	N/A.	Nesting birds on structures.	1	3	3	Following success of dry mill trial consider bird spikes.
CULTURAL HERITAGE	N/A.	N/A.	1	1	1	

ASPECT
EMISSION TO AIR
DISCHARGES TO WATER
RELEASES TO LAND
USE OF RAW MATERIALS
USE OF ENERGY

USE OF WATER
WASTE
ENVIRONMENTAL NUISANCE
BIODIVERSITY
CULTURAL HERITAGE

NORMAL
Flare stack to flare off biogas from anaerobic reactors. Methane -->CO2 + H2O aerobic reactor air vent emits air and water vapour from aerobic tank.
All discharges from WWTP goes to Ouse via outfall tank. COD, TSS, pH, flow and temperature are continually monitored to ensure they are below permitted limits.
N/A (in the future there may be excess sludge for land spreading/ land fill).
Small amounts of CIP solutions for cleaning ultra filter. Stored elsewhere and used immediately. Max conc used is 4% NaOH / KOH.
Use of electricity for pumps, blowers, heater, PLC, lights.

Use of untreated borehole water for pump seals and hoses.
Empty plastic containers from CIP chemicals, excess sludge.
Noise from pumps, visible flare from stack, low level odour.
N/A
N/A

WWTP
OPERATING CONDITIONS
ABNOI
Gas holder becoming overfull. In this event the relief system will vent methan vent
Supposing ultrafiltration running. Ultra filter failure (bypass) resulting in higher TS in leak to WWTP drains, drains connect directly to river, In case 'poisonous' material is transfered
Discharges to land caused by bund integrity fa

Potential for excessive oc
Nestin

RMAL / EMERGENCY	SEVERITY
e to atmosphere. This venting will be minimum. Flare stack fails to light, results in methane ing to atmosphere.	4
SS, poor hazardous feed to WWTP could raise discharge amounts. // Line or tank rupture results could result in sludge to Ouse or high COD material from concrete tank. d to WWTP the reactors can be denatured very quickly.	4
ailure. Discharges to land caused by reactor integrity failure.	3
N/A	1
N/A	2

N/A	2
N/A	2
dour in the event of a flare stack failure.	2
g birds on structures.	1
N/A	1

CONTROL	RATING NUMBER	CONTROLS OR RESPONSIBILITY
2	8	Gas holder high level alarm. Flare stack thermocouple and operator training (only used manually)
2	8	Ultra filter has continual monitoring so changes would alarm and are monitored via control room. WWTP feed stream subject to process monitoring and alarms. // in the event of a tank failure only use CCTV to detect and monitoring equipment at outfall to detect change. High quality materials used (piping etc.) and regular inspections.
2	6	Bund inspection and maintenance. The biological content of the reactor is not considered hazardous for the environment. Farmers spreading the sludge on the fields. To control soil penetration in place a system to pump the content in the emergency collection tank.
1	1	
2	4	

2	4	
1	2	All plastics recycled
3	6	Remote from population //ultra filter pumps in enclosure
5	5	Large open area, mink, birds nesting seen.
1	1	

	OPERATING CO
ASPECT	**NORMAL**
EMISSION TO AIR	Combustion products emitted via brick chimney and A1 / A27 / A41 (CO, No_x). Steam emissions from cooling towers.
DISCHARGES TO WATER	Blow down (water, treatment chemicals) from boilers discharging via blow down tank to WWTP Reverse Osmosis CIP solution to WWTP via drains. Clean demi water in drains from safety relief valves seals.
RELEASES TO LAND	N/A
USE OF RAW MATERIALS	RO treatment chemicals (sodium hydroxide, anti-scalant). Boiler treatment (Steamate, optispurse, control). CIP chemicals (Roclean pH3 and pH11). Bag and cartridge filters (PPE). General lubricants. Turbo oil.
USE OF ENERGY	Gas for turbines (7.5 MW electrical GT2, 7.1 MW electrical GT3) and boilers (27 tonnes of steam per hour combined). Electricity used for pumps, fans, lighting, air conditioning etc. New Boiler 10 which decommisions the old Boiler 8. Boiler 7 and Boiler 9 in operation.
USE OF WATER	Borehole water for reverse osmosis treatment plant (1st pass primarily for plant, 2nd pass for boilers steam raising) Mains water for cleaning floors, WC, sink and cooling water for sampling points.

WASTE	Oily rags and used spill kit materials (disposed of as hazardous waste) Packaging waste - plastics (pails), cardboard via recycling skips. Oil drums disposed of as hazardous wastes. Used filter cartridges and filter bags via general waste. Paper waste - via cardboard recycling skips.
ENVIRONMENTAL NUISANCE	Noise from turbines and gas compressors.
BIODIVERSITY	Nesting birds - pigeons. Mice nests.
CULTURAL HERITAGE	N/A.

CHP PLANT AND COOLING TOWERS

)NDITIONS

ABNORMAL / EMERGENCY	SEVERITY	CONTROL
Direct emission of boiler exhaust via bypass stack. A2/A37/A40 (CO, NO_x etc.) Venting of steam via pressure relief valves. Fire protection system venting (CO_2). Refrigerant gas leaks. Natural gas and steam leaks.	5	2
N/A	3	2
N/A	1	1
Spill kit materials used for bund overflow and leaks.	3	2
Gas, steam or hot water leaks would increase the required amounts of water/ natural gas.	5	3
Leaks from overhead pipework.	3	2

N/A	2	2
N/A	4	3
N/A	2	2
N/A	1	1

RATING NUMBER	CONTROLS OR RESPONSIBILITY
10	Annual boiler servicing 2,000 hourly services for turbines plus comprehensive annual service. Emissions monitored on a 12 monthly basis. Solar SoloNox system in place to minimise Nox (GT2,GT3)
6	Waste Water Treatment Plant, monitored continuously, alarms, etc. Bunded chemical storage.
1	
6	Controlled dosing of boiler treatment chemicals and reverse osmosis plant.
15	Aged boiler 8 replace by new Boiler 10 (on recovery from GT3) . Regular servicing. Washing turbine regularly (during trips or service periods).
6	Overhead pipework - leaks would be visual.

4	Waste segregated and disposed of as appropriate
12	Periodical Noise survey to keep record of noise conditions.
4	
1	

ASPECT
EMISSION TO AIR
DISCHARGES TO WATER
RELEASES TO LAND
USE OF RAW MATERIALS
USE OF ENERGY
USE OF WATER
WASTE
ENVIRONMENTAL NUISANCE
BIODIVERSITY
CULTURAL HERITAGE

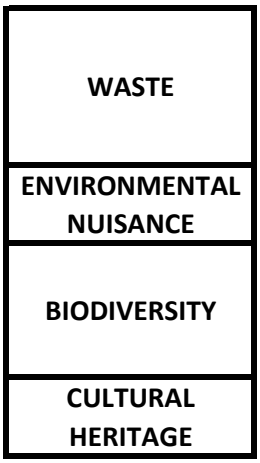
NORMAL
Forklifts, Tractor, JCB, Telehandler used for material movements on site. // Vehicle exhaust emission from truck movements. Emission from alcohol vapour and gluten/bran/starch dust during loading.
Washing out of stillage line, toilets, sinks in gate house and driver welfare area to WWTP // general cleaning of areas.
N/A
Fuel for site vehicles and third party hauliers.
Electricity for gate house operations and loading areas.
Cleaning and welfare.
General office waste, bran/gluten wastage to skip //bran and stillage samples disposed of 6 monthly to landfill.
Noise from truck movements.
N/A
N/A

SUPPLY CHAIN
OPERATING CONDITIONS
ABNOR
Increased vehicle emission due to increase usage on site and increased truck dist
Spillages/leaks of product, fuel/oil from vehicles releasing to Loader error le
Spillages/leaks of product, fuel/oil from vehicle
Clea
Bran/gluten wastage to skip increased in
If bypass is unusable the
Potential for birds ne Potential for Potential for hab
Potentia

RMAL / EMERGENCY	SEVERITY
ance. Potential for spillages of alcohol, fusel oils, heads and tails or gluten/starch loading spout tear.	3
WWTP or surface water drains. Primarily during loading and maintenance. eading to overfilling of trucks.	4
s releasaseing land. Primarily during loading and maintenance.	4
N/A	3
N/A	1
an up of spillages.	1
case of spill // alcohol spillage recycled to fermenters.	3
en roads near to housing may be used.	2
esting. Possible rodent infestation. accidents involving wildlife. bitat creation or enhancement.	3
al for driving accidents.	3

CONTROL	RATING NUMBER	CONTROLS OR RESPONSIBILITY
2	6	Hauliers sourced locally where possible. Low emission filling systems used and under routine maintenance work. Operated by competent staff only
2	8	All Spillages collected and recycled where appropriate. Bar code system implemented to remove loader error.
2	8	Procedures in place for spillage and sump transfers. Spill kits spread around the site.
1	3	
2	2	
1	1	
2	6	Bund emptying procedure in place.
2	4	Trucks during day, drivers use major roads only and must avoid driving within Selby.
2	6	Pest control in place
1	3	

ASPECT
EMISSION TO AIR
DISCHARGES TO WATER
RELEASES TO LAND
USE OF RAW MATERIALS
USE OF ENERGY
USE OF WATER


WASTE
ENVIRONMENTAL NUISANCE
BIODIVERSITY
CULTURAL HERITAGE

OPER
NORMAL
Welding fumes extracted to atmosphere. Dust extraction from dry mill screen room.
Hand basin to site drains.
Waste oil is stored, bunded in the workshop. Although there is a bund this is an area of high likely hood of small spillages.
Mild Steel, Stainless steel, general lubricants, diesel, paraffin (cleaning bath), argon gas, oxygen, acetylene, consumables (grinding discs etc.)
415V supply for welding equipment, pedestal grinder, radial arm drill, lathe, milling machine. 110V for all others. Charge cherry picker (240V)
Used only for hand washing and drinking.

Oily rags, waste metals, waste paper/wood, waste electrical, waste machinery, plastics.
Grinding noise etc.
N/A
N/A

MAINTENANCE

ATING CONDITIONS
ABNORMAL / EMERGENCY
Gas explosion.
Potential for lubricant or diesel spillages.
Potential for lubricant or diesel spillages.
Possibility for toxic material (galvanised materials) to require welding --> very infrequent.
N/A
N/A

N/A
N/A
N/A
N/A

SEVERITY	CONTROL	RATING NUMBER	CONTROLS OR RESPONSIBILITY
1	5	5	Systems to protect engineers, only used in manual. Once a year checked emission with contractor.
2	1	2	Spillage kits (absorbent mats) gas bottles chained and stored safely, diesel 25l containers unbunded. No drainage inside so any spillage contained. No filters on extractions. Negligible discharge amounts and intermittent and all actions manual
1	3	3	Spillage kits (absorbent mats) gas bottles chained and stored safely, diesel 25l containers on bunds. No drainage inside so any spillage contained. No filters on extractions. Negligible discharge amounts and intermittent and all actions manual
2	4	8	Spillage kits (absorbent mats) gas bottles chained and stored safely, diesel 25l containers unbunded. No drainage inside so any spillage contained. No filters on extractions. Negligible discharge amounts and intermittent and all actions manual
2	2	4	Infrequent use of most high duty machinery. Used only manually.
1	1	1	

3	1	3	All waste recycled where possible, material used efficiently. Waste segregated and stored in dedicated drums and bunded.
2	1	2	Workshop indoors, away from residential area
1	1	1	Workshop indoors, doors closed
1	1	1	

ASPECT
EMISSION TO AIR
DISCHARGES TO WATER
RELEASES TO LAND
USE OF RAW MATERIALS
USE OF ENERGY
USE OF WATER
WASTE
ENVIRONMENTAL NUISANCE
BIODIVERSITY
CULTURAL HERITAGE

NORMAL
N/A
N/A
N/A
N/A
None
None
Waste from storage is nil as it is considered within waste of area of use.
None
None
N/A

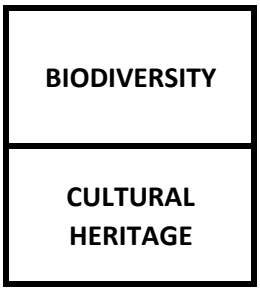
STORES/WAREHOU
OPERATING CONDITIONS
ABNOI
If an IBC is breached potentia
Bunded area has no dedicated drainage s Possible that loaders might not follow samp
Potential for accidental spillage of liquid. Warehouse
Potential odc
Potential for birds

SING

RMAL / EMERGENCY	SEVERITY
l for Cl emission from sodium hypochlorite.	1
o any overflow goes to WWTP. Some Hypo stored here. ling procedure and pump contents direct to surface water	3
e facilities have no dedicated bund, liquid storage to be minimised.	2
N/A	1
N/A	1
N/A	1
N/A	1
ur from accidental spillage.	1
s nesting, no pigeon protection.	2
N/A	1

CONTROL	RATING NUMBER	CONTROLS OR RESPONSIBILITY
1	1	Storage area outside, all IBC's are none volatile
3	9	Severe spillages can be diverted to emergency collection tank
3	6	Movements to be minimised storage to be minimised All operators to be aware of spillage response procedure
1	1	
1	1	
1	1	
1	1	Dry sugars to be reprocessed
4	4	Away from populated area and small volumes only
3	6	Implement pest inspection to improve control Bird spikes have been implemented
1	1	

ASPECT
EMISSION TO AIR
DISCHARGES TO WATER
RELEASES TO LAND
USE OF RAW MATERIALS
USE OF ENERGY
USE OF WATER
WASTE
ENVIRONMENTAL NUISANCE


BIODIVERSITY
CULTURAL
HERITAGE

NORMAL
Extraction fans, boiler pressure relief valve.
All effluent to city sewerage.
N/A
Paper, printer cartridges/office supplies, food, drinking water.
Electricity for: lighting, heating, electrical equipment.
Toilets, hand basins, general washing, drinking water.
waste paper, general waste (food, office waste, plastics) Cardboard, electrical equipment, old PPE.
Staff driving movements.

N/A
N/A

OFFICES (PROCUREI
OPERATING CONDITIONS
ABNOI

Birds r

VIENT)

RMAL / EMERGENCY	SEVERITY
N/A	1
N/A	1
N/A	1
N/A	2
N/A	2
N/A	1
Building waste	3
N/A	2

nesting in structures.	2
N/A	1

CONTROL	RATING NUMBER	CONTROLS OR RESPONSIBILITY
2	2	Boiler regularly serviced, extraction fans manual
1	1	
1	1	
3	6	Paper recycled, all waste disposed of via landfill, printer cartridges and batteries recycled;
2	4	Improvements: Timed lighting, close windows, heat recovery for heating, lights off/power off policy. With office heat recovery gas usage is totally reduced.
1	1	
2	6	Paper recycled, all waste disposed of via landfill, printer cartridges and batteries recycled. Improve waste segregation:clean plastic recycled.
1	2	

2	4	Pest control in place.
1	1	

ASPECT
EMISSION TO AIR
DISCHARGES TO WATER
RELEASES TO LAND
USE OF RAW MATERIALS
USE OF ENERGY
USE OF WATER
WASTE
ENVIRONMENTAL NUISANCE
BIODIVERSITY
CULTURAL HERITAGE

NORMAL
Vehicle emssions from equipment delivery and construction vehicles. Dust emissions form construction work. Emissions from diesel generators.
N/A
N/A
Generic construction materials. Internal fittings.
Diesel usage for generators and vehicles.
Washing and mixing. Borehole water.
Ground excavation waste (inert waste) reused for on-site aggregate. Packaging, damaged material and demolition waste.
Noise, dust, vibration, mud on roads.
N/A
N/A

	PROJECTS
OPERATING CONDITIONS	
	ABNOI
	Increased emission
Run off of: Silt, cement, oils, fuels etc. escaping to drains (WWTP or surf	
Run off of: cement, oils, fuels etc. escaping to land.	Damage to ground via dril
	Increased nuisance due to times of operation and
	Potential for damage to f

RMAL / EMERGENCY	SEVERITY
s during times of greater activity.	3
ace water). Damage to ground via drilling/piling and .: creation of pollution pathways.	5
ling/piling and .: creation of pollution pathways. Treatment of historically contaminated land.	5
N/A	4
N/A	3
N/A	1
N/A	2
d/or weather conditions (mud on roads, dust in dry conditions).	3
lora and fauna from construction work.	2
N/A	1

CONTROL	RATING NUMBER	CONTROLS OR RESPONSIBILITY
2	6	Selection of contractors tightly controlled through PQQ/ tender process.
2	10	Spill kits required by all contractors. WWTP.
3	15	Historically contaminated soil under treratment - currently only stored on plastic sheeting. Radioactivity.
2	8	Selection of contractors tightly controlled through PQQ/ tender process.
2	6	Selection of contractors tightly controlled through PQQ/ tender process.
2	2	Low scale of usage
2	4	Scrap metal recycled, ground excavations and demolition waste recycled as aggregate. Contractors use own skips.
2	6	No complaint received, operating times specified, road sweeper used on site.
2	4	Previous surveys show nothing of significance.
1	1	Previous surveys show nothing of significance.

ASPECT
EMISSION TO AIR
DISCHARGES TO WATER
RELEASES TO LAND
USE OF RAW MATERIALS
USE OF ENERGY
USE OF WATER
WASTE
ENVIRONMENTAL NUISANCE
BIODIVERSITY
CULTURAL HERITAGE

NORMAL
Forklifts, Tractor, JCB, used for material movements on site. Vehicle exhaust emission from truck movements.
Discharge of collected rain water to surface water drains.
N/A
Fuel for site vehicles and third party hauliers.
Electricity for warehouse operations and unloading and decanting areas.
Cleaning and welfare.
Packaging waste generation.
Noise from truck movements.
N/A
N/A

UNIGLAD
OPERATING CONDITIONS
ABNOI
Spillages/leaks of product, fuel/oil from
Spillages/leaks of product
Clea
Spill kit ma
Potential for birds nesti Potential for Potential for hab
Potentia

RMAL / EMERGENCY	SEVERITY
N/A.	2
ı vehicles releasing to WWTP or surface water drains.	4
, fuel/oil from vehicles releasing to land	4
N/A	3
N/A	2
an up of spillages.	1
aterial waste generation.	3
N/A	2
ng. Possible rodent/wasp infestation. accidents involving wildlife. bitat creation or enhancement.	3
al for driving accidents.	3

CONTROL	RATING NUMBER	CONTROLS OR RESPONSIBILITY
2	4	Operations carried out by competent staff only. LPG forklift trucks maintained according to manufacturer instructions.
2	8	All Spillages collected and recycled where appropriate. Spillage response procedure in place.
1	4	Spillages very unlikely on land, internal not permeating surface. Tarmac outside, only high viscosity products, spill kit available.
2	6	
2	4	
2	2	
2	6	reuse of IBCs
2	4	Trucks during day
2	6	Pest control in place
1	3	

ASPECT
EMISSION TO AIR
DISCHARGES TO WATER
RELEASES TO LAND
USE OF RAW MATERIALS
USE OF ENERGY
USE OF WATER
WASTE
ENVIRONMENTAL NUISANCE
BIODIVERSITY
CULTURAL HERITAGE

NORMAL
Suction hood during normal analysis operations.
Clean water release in sewer
N/A
Chemicals (Acids and alcaline solutions); raw product to be analysed.
Low consumption of energy for instrumentation,oven, Air con.
Water usage for analysis and dilutions.
Not recyclable plastics in general waste, recycled paper.
N/A
N/A
N/A

LAB
OPERATING CONDITIONS
ABNOI
Sample

RMAL / EMERGENCY
N/A
in the sink by mistake.
N/A
N/A
N/A
N/A
N/A
N/A
N/A
N/A

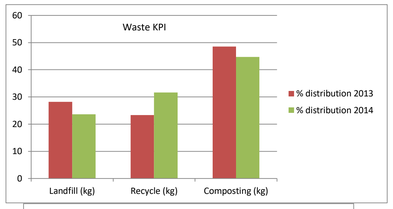
SEVERITY	CONTROL	RATING NUMBER	CONTROLS OR RESPONSIBILITY
1	1	1	Periodical filter change and suction hood calibration every year.
3	1	3	Training to operators and waste samples bucket provided.
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	
1	1	1	

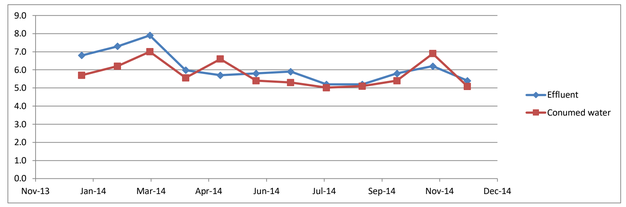
rev.	title
…	…
1	KPI and Targets 2017
2	KPI and Targets 2018
3	KPI and Targets 2019

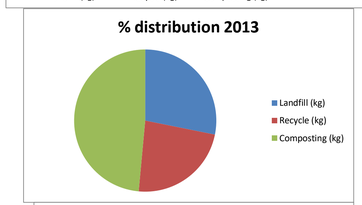
notes
…
addition of 2017 sheet related+ target for the year "KPI setting"
addition of 2018 sheet
Addition of 2019 sheet, formatting to include historical data

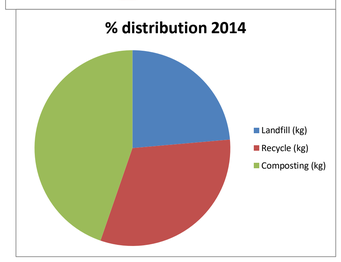
SEDALCOL ENVIRONMENTAL REPORT 2014

		COMPLAINTS				SUGGESTIONS	INCIDENTS	CAR	WWTP				WASTE			CO2			ENERGY	WATER
	Wheat (grind)	Dust	noise	odour	others			(External)	Outfall COD (mg/l)	Outfall BOD (mg/l)	Process COD (mg/l)	Effluent volume (m3/ton flour)	Landfill (kg)	Recycle (kg)	Composting (kg)	emission (ton)	allocation (ton)	difference (ton)	(kwh/tonne of wheat) (kwh/tonne of wheat)	(smc/tonne of wheat) (smc/tonne of wheat)
Jan-14	12,029	0	0	0	0	0	0	0	45.0	11.5	1,744.7	6.8	3400	323	9940	3,559	2,822	737	1382.4	5.7
Feb-14	11,038	0	0	0	0	0	1	0	41.0	10.1	1,628.6	7.3	3700	3895	6210	3,264	2,822	442	1372.8	6.2
Mar-14	10,421	0	0	0	0	1	1	0	45.8	7.6	2,122.3	7.9	6000	3050	8390	2,730	2,822	-92	1199.7	7.0
Apr-14	12,618	0	0	0	0	0	4	0	39.8	7.1	1,783.4	6.0	3640	9880	3420	3,402	2,822	580	1256.2	5.6
May-14	13,285	0	0	0	0	1	0	3	49.7	7.5	2,243.0	5.7	5840	6510	9080	3,504	2,822	682	1227.2	6.6
Jun-14	12,960	0	0	0	0	0	3	0	25.9	4.4	2,170.6	5.8	5120	16706	5580	3,331	2,822	509	1208.0	5.4
Jul-14	13,423	0	0	0	0	0	3	0	27.0	5.0	2,782.1	5.9	2600	3100	9460	3,257	2,822	435	1140.0	5.3
Aug-14	13,702	0	0	0	0	0	1	0	24.2	4.8	2,251.4	5.2	5120	7920	7140	3,444	2,822	622	1180.1	5.0
Sep-14	13,488	0	0	0	0	0	1	2	21.3	3.9	2,660.9	5.2	3800	4870	9480	3,355	2,822	533	1207.0	5.1
Oct-14	13,420	0	0	0	0	0	0	4	23.8	5.5	2,360.9	5.8	1300	200	8600	3,556	2,822	734	1243.9	5.4
Nov-14	13,181	0	0	0	0	0	4	0	22.3	3.1	2,442.2	6.2	9440	10700	6200	3,527	2,822	705	1285.2	6.9
Dec-14	13,457	0	0	0	0	0	2	0	23.4	3.8	2,604.0	5.4	880	1057	12760	3,630	2,822	808	1270.9	5.1
total 2014	**153,022**	**0**	**0**	**0**	**0**	**2**	**20**	**9**	**32.44**	**6.19**	**2232.84**	**6.10**	**50840**	**68211**	**96260**	**40559**	**33864**	**6695**	**1247.8**	**5.8**
total 2013	**149179.4**	**0**	**0**	**0**	**0**	**-**	**-**	**-**	**29.4**	**8.4**	**1550.0**	**5.1**	**43760**	**36220**	**75400**	**42018**			**1312.2**	**4.7**
target	-	0				10	-	-	<25	<8	<1500	<6	<28%	>23%	>49%		<3500		<1300	<6
												Monthly Average 2013 -	3647	3018	6283	3502				
												Running Monthly Average 2014 -	4237	5684	8022					
												% distribution 2013	28	23	49					
												% distribution 2014	24	32	45					







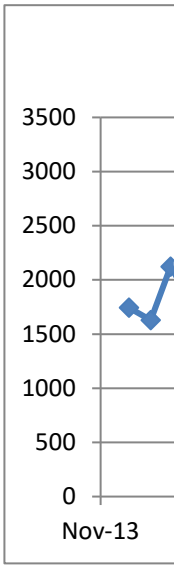


SEDALCOL ENVIRONMENTAL REPORT 20

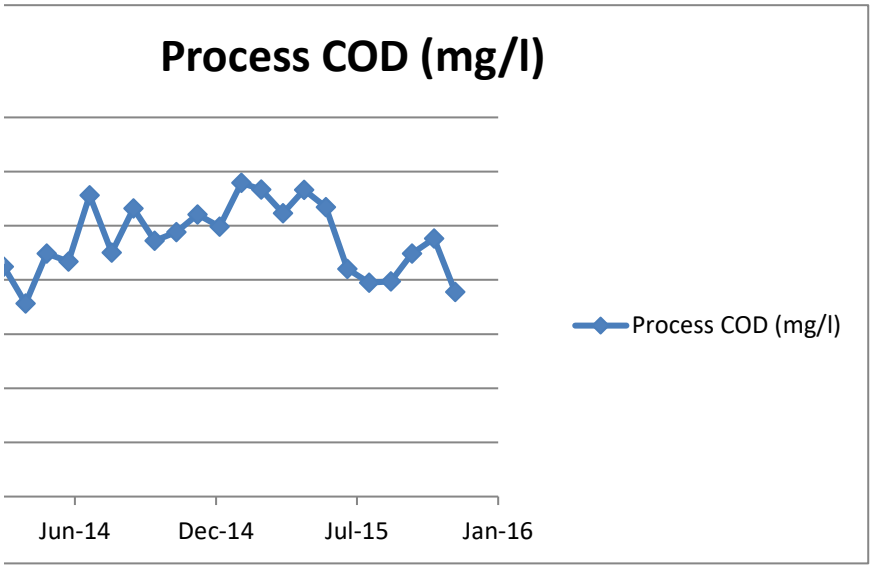
		COMPLAINTS				SUGGESTIONS
	Wheat (grind)	Dust	noise	odour	others	
Jan-15	13,804	0	0	0	0	0
Feb-15	13,289	0	0	0	0	0
Mar-15	14,427	0	0	0	0	0
Apr-15	14,547	0	0	0	0	0
May-15	14,663	0	0	0	0	0
Jun-15	14,724	0	0	0	0	0
Jul-15	14,818	0	0	0	0	0
Aug-15	14,962	0	0	0	0	0
Sep-15	14,880	0	0	0	0	0
Oct-15	15,140	0	0	0	0	0
Nov-15	12,585	0	0	0	0	0
Dec-15	14,729	0	0	0	0	0
total 2015	**172,568**	**0**	**0**	**0**	**0**	**0**
total 2014	**153022**	**0**	**0**	**0**	**0**	**2.0**
total 2013	**149179**	**0**	**0**	**0**	**0**	**-**
target	**-**	**0**				**10**

15

INCIDENTS	CAR (External)	Outfall COD (mg/l)	Outfall BOD (mg/l)
1	0	24.1	4.7
0	0	24.8	3.3
1	0	28.5	3.9
3	2	29.4	3.3
2	2	27.3	5.1
0	0	27.6	6.0
1	1	30.2	5.7
2	2	35.5	7.0
0	0	37.4	9.8
2	0	42.9	9.2
0	0	34.4	7.4
1	1	35.4	7.7
13	**8**	**31.5**	**6.1**
20.0	**9.0**	**32.4**	**6.2**
-	**-**	**29.4**	**8.4**
-	**-**	**<25 (as 2014)**	**<7 (8 in 2014)**

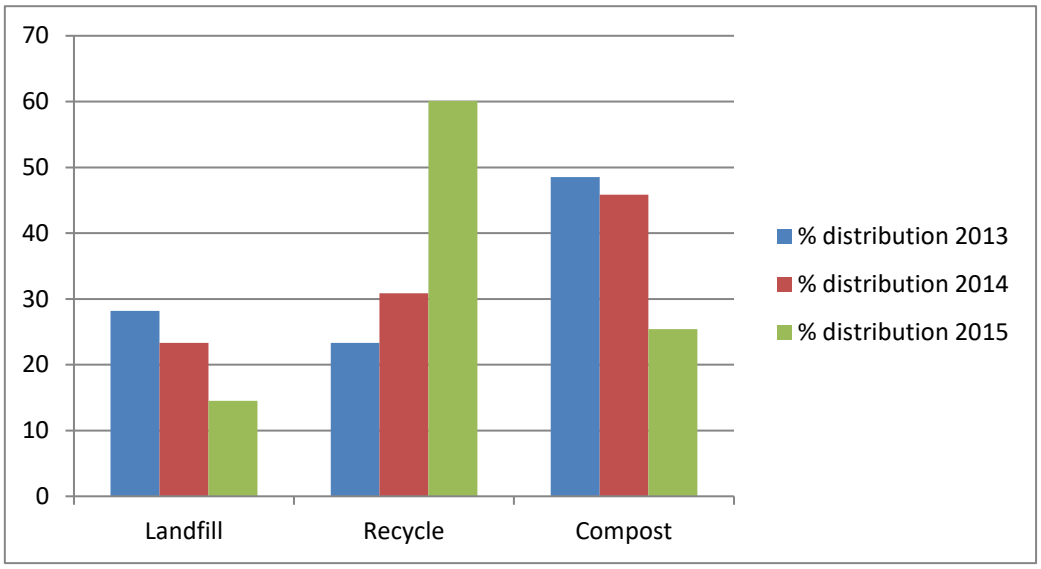


WWTP		
TSS (mg/l)	Process COD (mg/l)	Effluent volume (m3/ton flour)
7.0	2,492.3	5.2
5.2	2,895.4	4.8
5.4	2,835.0	4.8
7.7	2,614.6	5.3
8.0	2,832.3	4.8
7.5	2,673.0	5.3
7.2	2,101.8	5.4
8.4	1,975.2	4.9
7.6	1,985.0	5.6
10.5	2,244.0	4.8
8.8	2,382.0	5.7
9.5	1,890.1	5.4
7.7	**2,410.1**	**5.2**
10.5	**2232.8**	**6.1**
	1550.0	**5.1**
	<2500 (1500 in 2014)	**<6 (as 2014)**
		Monthly Average 2014 -
		Running Monthly Average 2015 -
		% distribution 2013
		% distribution 2014
		% distribution 2015



	Process COD (mg/l)
Jan-14	**1745**
Feb-14	**1629**
Mar-14	**2122**
Apr-14	**1783**
May-14	**2243**
Jun-14	**2171**
Jul-14	**2782**
Aug-14	**2251**
Sep-14	**2661**
Oct-14	**2361**
Nov-14	**2442**
Dec-14	**2604**
Jan-15	**2492**
Feb-15	**2895**
Mar-15	**2835**
Apr-15	**2615**
May-15	**2832**
Jun-15	**2673**
Jul-15	**2102**
Aug-15	**1975**
Sep-15	**1985**
Oct-15	**2244**
Nov-15	**2382**
Dec-15	**1890**

WASTE			
Landfill (kg)	Recycle (kg)	Composting (kg)	emission (ton)
3700	3020	7660	3,756
4000	7610	5640	3,430
1420	3770	8440	3,348
6660	720	6120	3,510
3600	7070	9800	3,622
0	259	7800	3,146
6700	11073	7300	3,501
1550	1040	9240	3,491
4320	8000	8640	3,367
4140	4930	5000	3,708
9280	44738	3080	3,370
4320	104223	4040	3,958
49690.0	**196453.0**	**82760.0**	**42206**
48200.0	**63856.0**	**94790.0**	**40559**
43760.0	**36219.5**	**75400.0**	**3502**
<25% (25% in 2014)	**>30% (23% in 2014)**	**NA**	
4017	**5321**	**7899**	
4141	**16371**	**6897**	
28	**23**	**49**	
23	**31**	**46**	
15	**60**	**25**	



	Landfill	Recycle	Compost
% distribution 2013	28	23	49
% distribution 2014	23	31	46
% distribution 2015	15	60	25

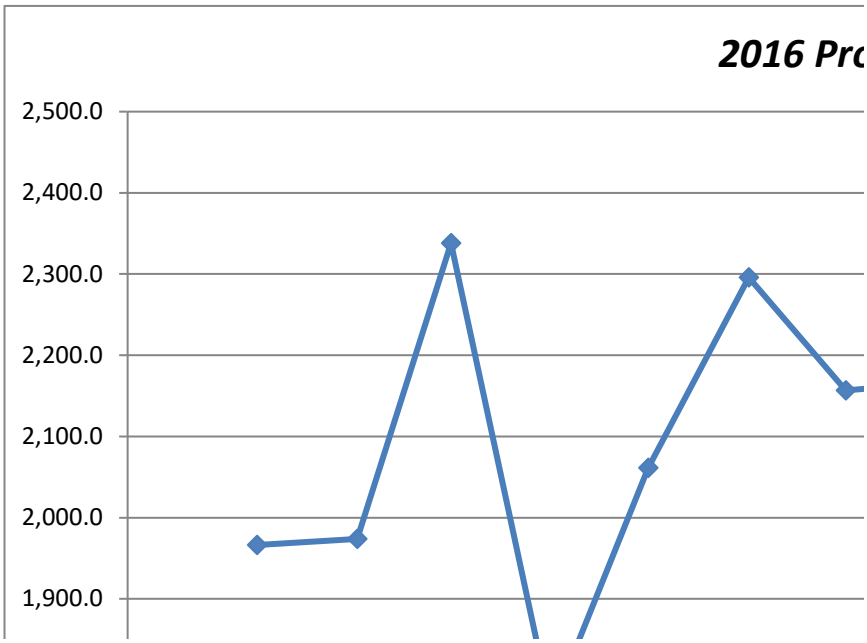
CO2		ENERGY
allocation (ton)	difference (ton)	(kwh/tonne of wheat)
2,310	1,446	1276.3
2,310	1,120	1212.1
2,310	1,038	1090.0
2,310	1,200	1132.0
2,310	1,312	1159.0
2,310	836	1001.0
2,310	1,191	1081.0
2,310	1,181	1098.7
2,310	1,057	1064.0
2,310	1,398	1152.8
2,310	1,060	1252.5
2,310	1,648	1259.9
27720	**14486.01**	**1148.3**
33864.0	**-6695.1**	**1247.8**
		1312.2
<3500 (as in 2014)		**<1260 (1300 in 2014)**

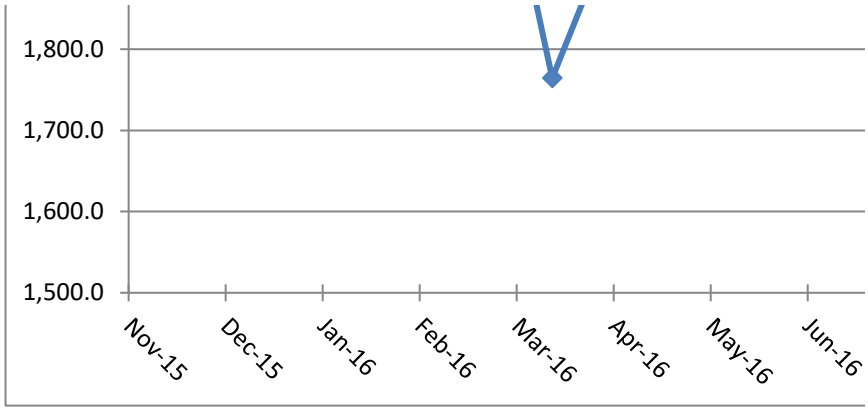
WATER
of wheat)
5.0
4.8
5.0
5.0
4.6
5.2
5.3
4.9
4.4
4.3
4.9
4.8
4.9
5.8
4.7
<6 (as 2014)

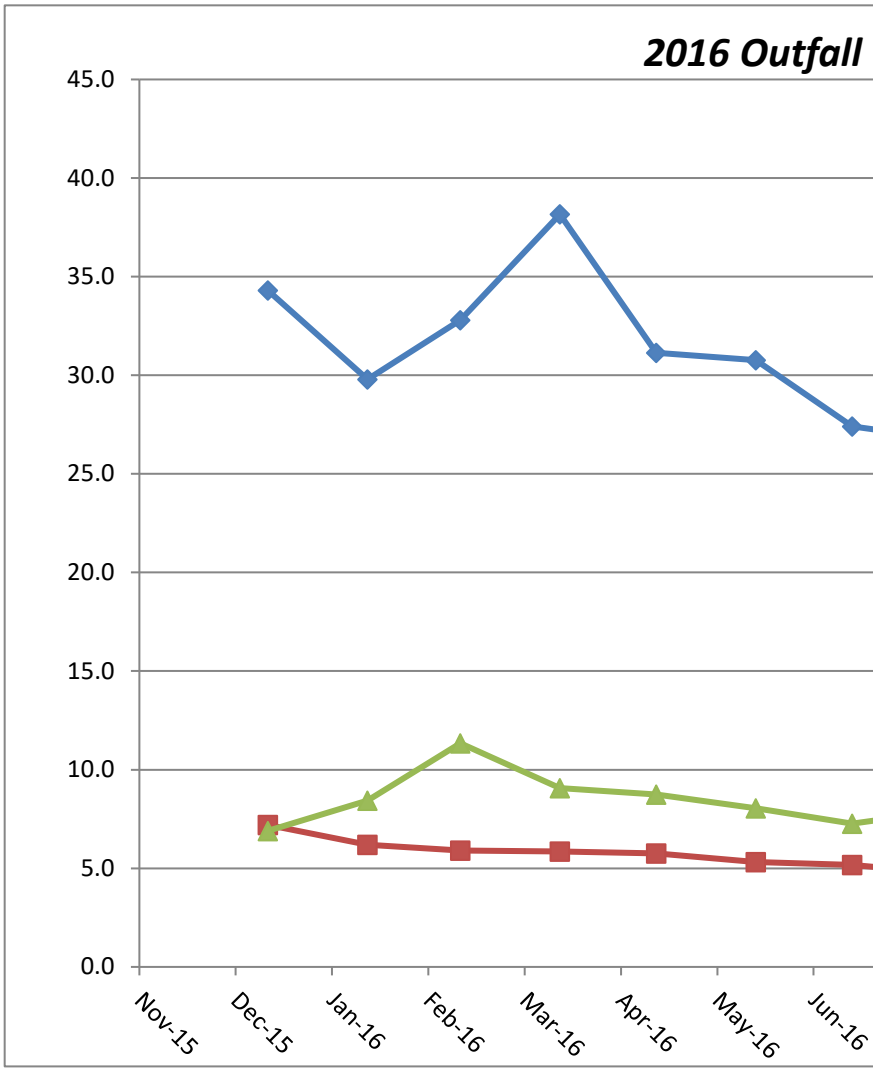
		COMPLAINTS				SUGGESTIONS
	Wheat (grind)	Dust	noise	odour	others	
Jan-16	15,333	0	0	0	0	0
Feb-16	14,535	0	0	0	0	0
Mar-16	14,247	0	0	0	0	0
Apr-16	15,681	0	0	0	0	0
May-16	15,201	0	0	0	0	1
Jun-16	14,202	0	0	0	0	1
Jul-16	17,048	0	0	0	0	0
Aug-16	16,623	0	0	0	0	0
Sep-16	18,429	0	0	0	0	0
Oct-16	18,672	0	0	0	0	0
Nov-16	17,926	0	0	1	0	0
Dec-16	19,096	0	0	0	0	0
total 2016	**196,993**	**0**	**0**	**1**	**0**	**2**
total 2015	**172,568**	**0**	**0**	**0**	**0**	**0**
total 2014	**153,022**	**0**	**0**	**0**	**0**	**2**
total 2013	**149,179**	**0**	**0**	**0**	**0**	**-**
target	**-**	**0**				**10**

SEDALCOL ENVIRONMENT

INCIDENTS	CAR (External)	Outfall COD (mg/l)	Outfall BOD (mg/l)
0	1	34.3	7.2
0	1	29.8	6.2
3	2	32.8	5.9
2	0	38.2	5.9
1	1	31.1	5.8
3	0	30.8	5.3
2	1	27.4	5.2
2	2	26.7	4.7
2	0	24.7	5.0
0	0	27.3	6.8
0	0	29.8	7.1
0	0	26.5	6.1
15	**8**	**29.9**	**5.9**
13	**8**	**31.5**	**6.1**
20	**9**	**32.4**	**6.2**
-	**-**	**29.4**	**8.4**
-	**-**	**<30**	**<6**



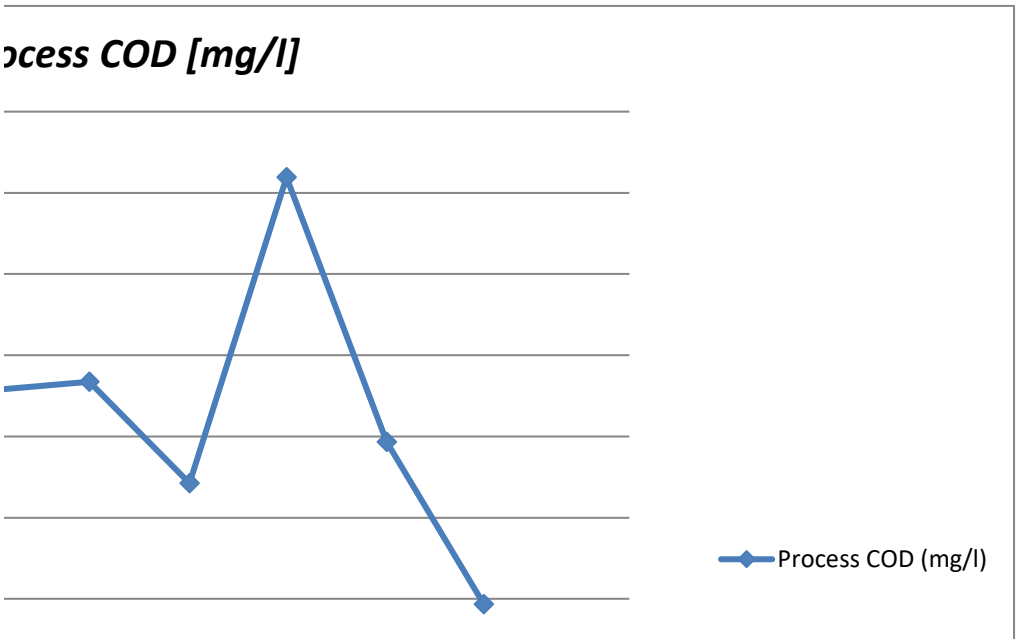

1,800.0
1,700.0
1,600.0
1,500.0
Nov-15
Dec-15
Jan-16
Feb-16
Mar-16
Apr-16
May-16
Jun-16

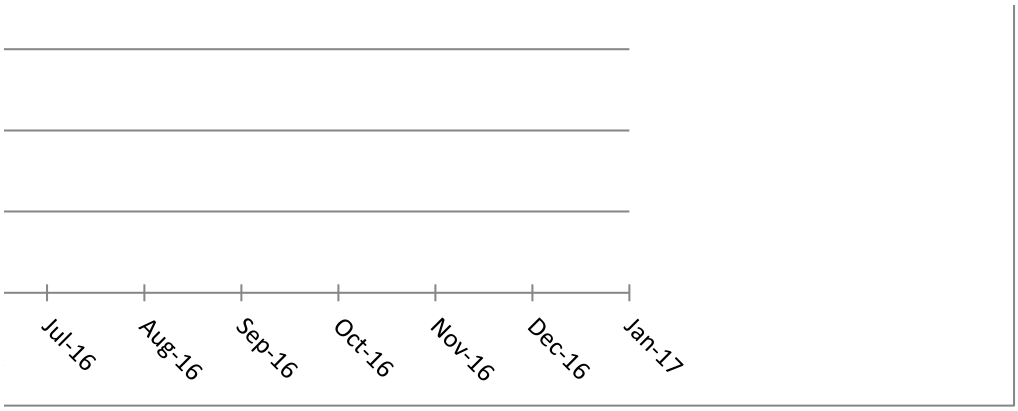

2016 Outfall
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
Nov-15
Dec-15
Jan-16
Feb-16
Mar-16
Apr-16
May-16
Jun-16

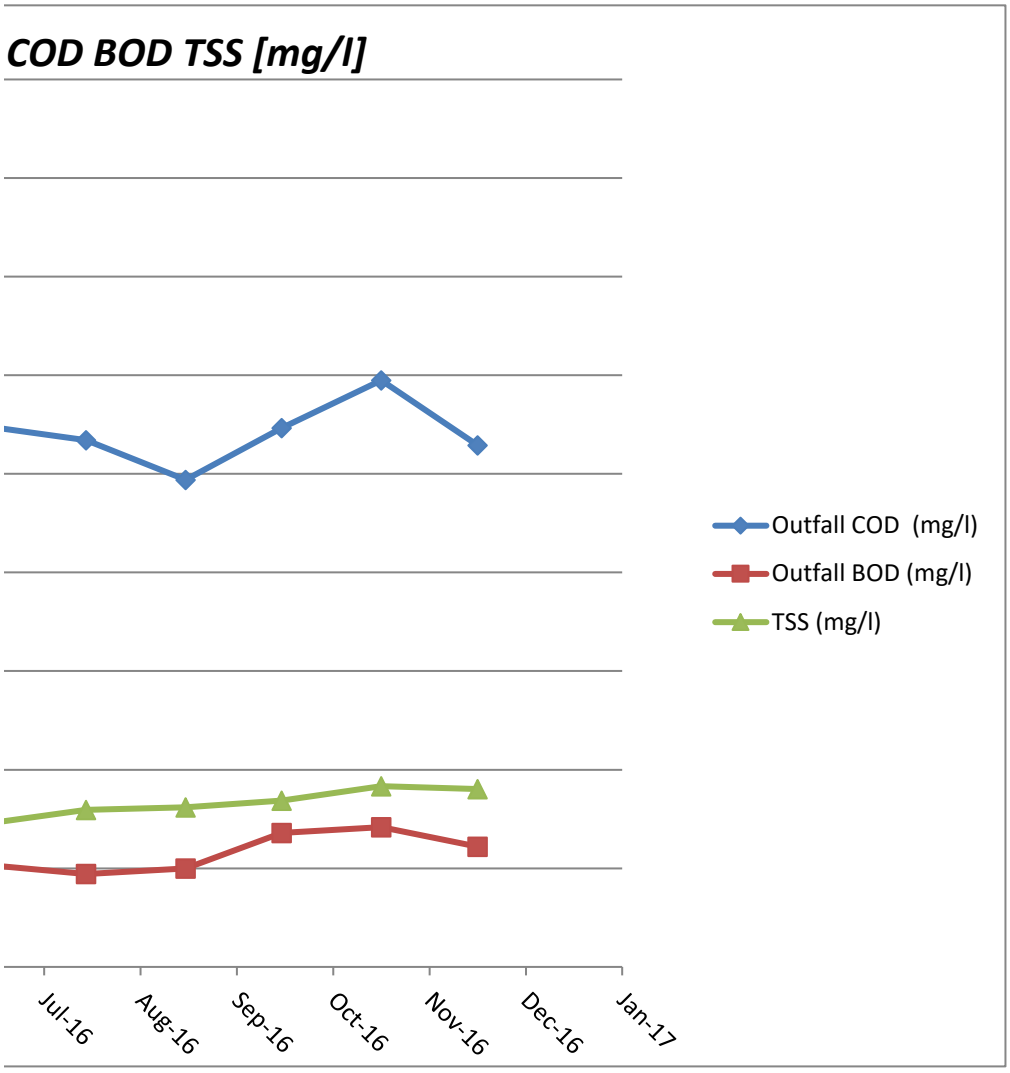
AL REPORT 2016

WWTP		
TSS (mg/l)	Process COD (mg/l)	Effluent volume (m3/ton flour)
6.9	1,966.2	5.0
8.4	1,973.7	4.9
11.3	2,338.2	5.2
9.1	1,764.4	4.0
8.8	2,061.4	4.6
8.1	2,295.8	5.0
7.3	2,156.8	4.3
8.0	2,167.4	4.3
8.1	2,042.2	4.0
8.4	2,419.1	3.8
9.2	2,093.3	3.7
9.0	1,893.5	3.5
8.5	**2,097.7**	**4.4**
7.7	**2,410.1**	**5.2**
10.5	**2232.8**	**6.1**
	1550.0	**5.1**
	<2400	**<5.5 (6 in 2015)**

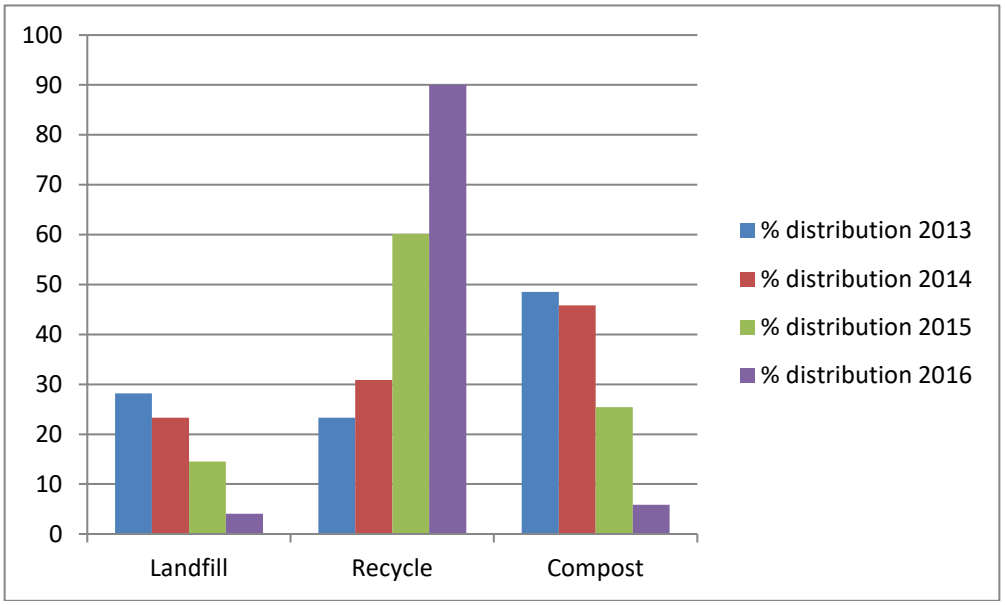
Monthly Average 2015 -
Running Monthly Average 2016 -
% distribution 2013
% distribution 2014
% distribution 2015
% distribution 2016




Jul-16
Aug-16
Sep-16
Oct-16
Nov-16
Dec-16
Jan-17


COD BOD TSS [mg/l]
Outfall COD (mg/l)
Outfall BOD (mg/l)
TSS (mg/l)
Jul-16
Aug-16
Sep-16
Oct-16
Nov-16
Dec-16
Jan-17

WASTE			
Landfill (kg)	Recycle (kg)	Composting (kg)	emission (ton)
1840	280690	4660	3,917
1560	305060	8860	3,643
2400	136883	5740	3,816
800	49890	3980	3,873
8080	221581	9080	3,906
6020	4790	4660	3,831
220	12060	4500	3,882
13500	42258	7500	3,902
0	26690	6180	3,821
4060	1358	5920	4,001
1500	13668	6420	3,958
10600	23400	5360	3,958
50580.00	**1118328.0**	**72860.0**	**46508.12**
47310.00	**196103.0**	**82860.00**	**42206.09**
48200.0	**63856.0**	**94790.0**	**40559.1**
43760.0	**36219.5**	**75400.0**	**3501.5**
<25% (as in 2015)	**>30% (as in 2015)**	**NA**	
3943	**16342**	**6905**	
4215	**93194**	**6072**	
28	**23**	**49**	
23	**31**	**46**	
15	**60**	**25**	
4	**90**	**6**	



	Landfill	Recycle	Compost
% distribution 2013	28	23	49
% distribution 2014	23	31	46
% distribution 2015	15	60	25
% distribution 2016	4	90	6

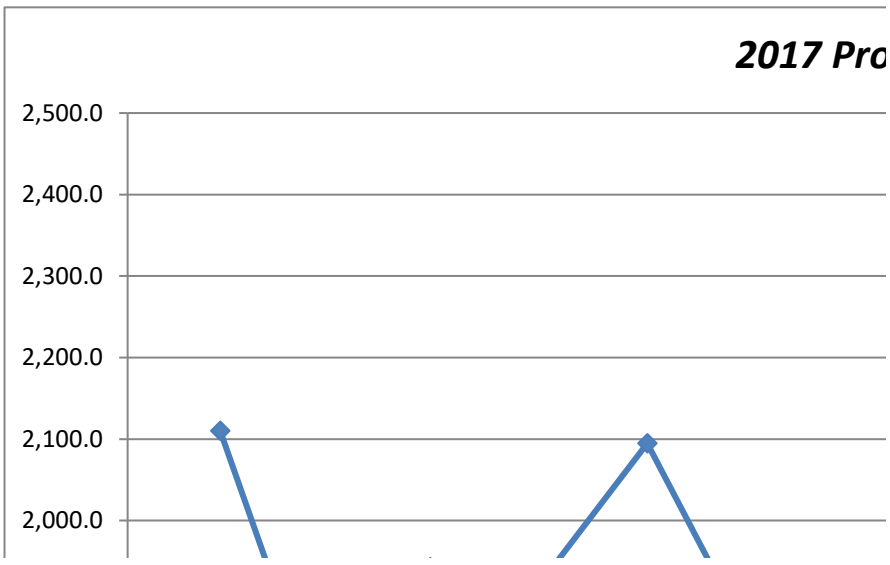
CO2		ENERGY
allocation (ton)	difference (ton)	consumption (kwh/tonne
2,268	1,649	1199.5
2,268	1,375	1178.0
2,268	1,548	1255.8
2,268	1,605	1141.3
2,268	1,638	1203.9
2,268	1,563	1164.7
2,268	1,614	1068.9
2,268	1,634	1102.9
2,268	1,553	973.1
2,268	1,733	995.9
2,268	1,690	1030.8
2,268	1,690	1101.7
27216.00	**19292.12**	**1118.0**
27720.08	**-14486.01**	**1148.3**
33864.0	**-6695.1**	**1247.8**
		1312.2
<4000 (3500 in 2014)		**<1200 (1260 in 2015)**

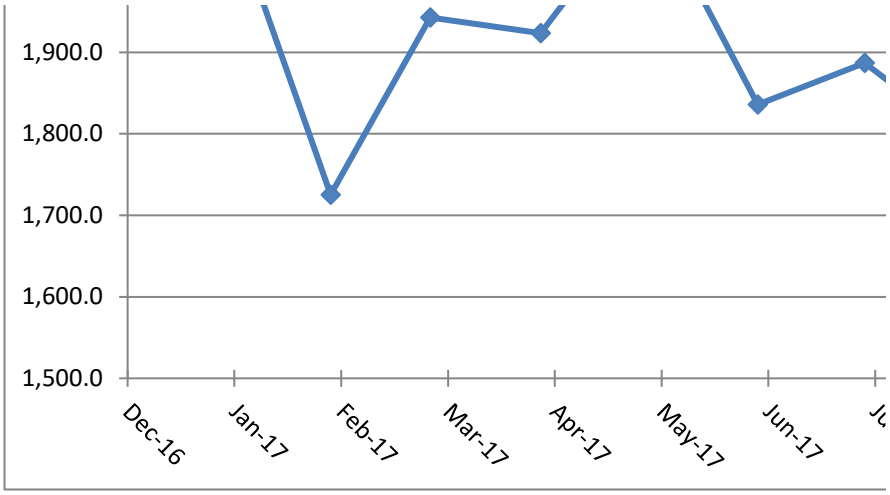
WATER (smc/tonne of wheat)
4.7
4.6
4.6
3.8
4.6
4.7
4.4
5.2
4.1
3.9
3.6
3.3
4.3
4.9
5.8
4.7
<5.5 (6 in 2015)

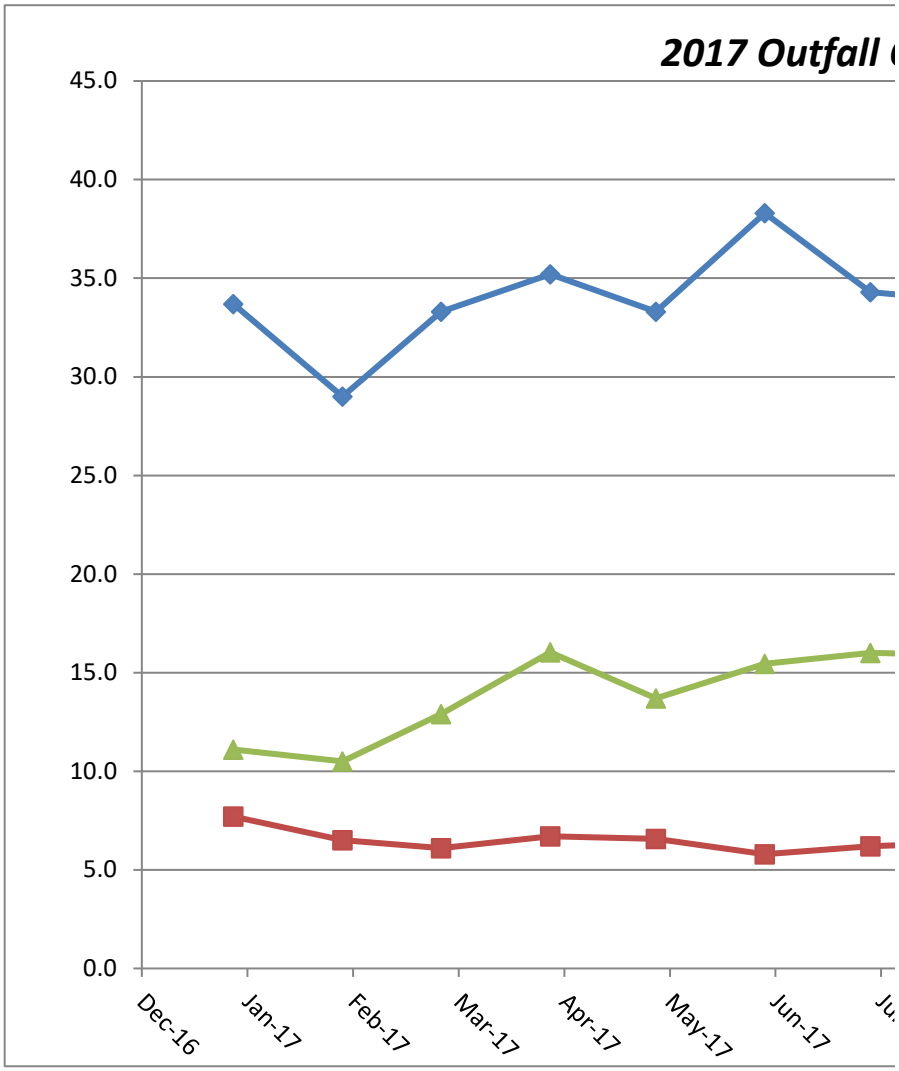
		COMPLAINTS				SUGGESTIONS
	Wheat (grind)	Dust	noise	odour	others	
Jan-17	19,796	0	0	0	0	0
Feb-17	16,272	0	0	0	0	0
Mar-17	17,732	0	0	0	0	0
Apr-17	19,456	0	0	0	0	0
May-17	17,763	0	0	1	0	0
Jun-17	19,080	0	0	0	0	0
Jul-17	20,646	0	0	0	0	1
Aug-17	21,012	0	0	0	0	1
Sep-17	20,067	0	0	0	0	0
Oct-17	22,134	0	0	0	0	0
Nov-17	20,130	0	0	0	0	0
Dec-17	22,182	0	0	0	0	0
total 2017	**236,270**	**0**	**0**	**1**	**0**	**2**
total 2016	**19,104**	**0**	**0**	**1**	**0**	**2**
total 2015	**172,568**	**0**	**0**	**0**	**0**	**0**
total 2014	**153,022**	**0**	**0**	**0**	**0**	**2**
total 2013	**149,179**	**0**	**0**	**0**	**0**	**-**
target	**-**	**0**				**10**

SEDALCOL ENVIRONMEN

INCIDENTS	CAR (External)	Outfall COD (mg/l)	Outfall BOD (mg/l)
0	0	33.7	7.7
4	1	29.0	6.5
1	2	33.3	6.1
1	1	35.2	6.7
1	0	33.3	6.6
1	1	38.3	5.8
4	0	34.3	6.2
0	0	33.8	6.4
2	0	34.7	6.1
4	2	34.4	5.0
2	0	38.7	5.6
1	0	36.7	5.9
21	**7**	**34.6**	**6.2**
15	**8**	**29.9**	**5.9**
13	**8**	**31.5**	**6.1**
20	**9**	**32.4**	**6.2**
-	**-**	**29.4**	**8.4**
-	**-**	**<30**	**<6.0**



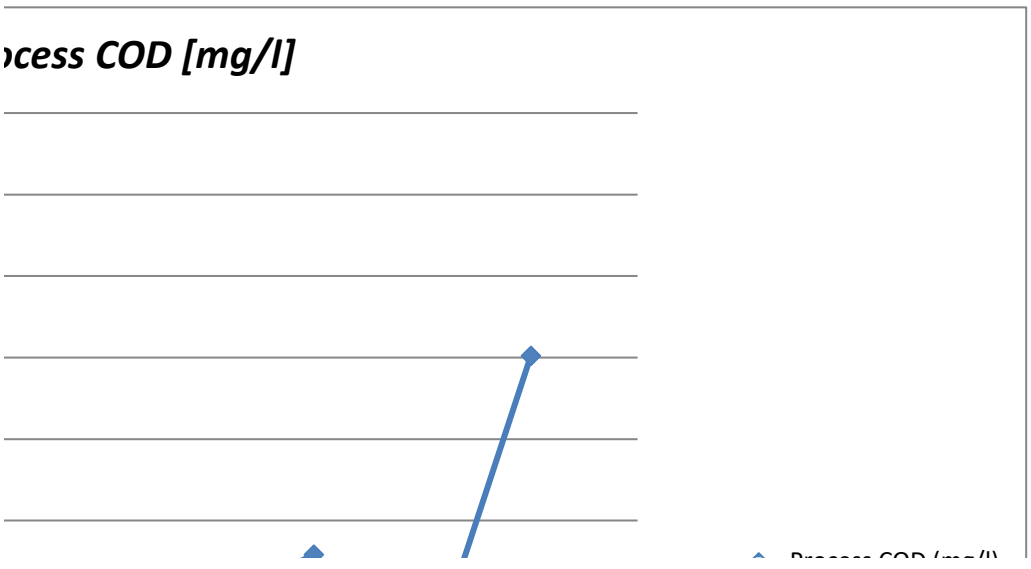

1,900.0
1,800.0
1,700.0
1,600.0
1,500.0
Dec-16
Jan-17
Feb-17
Mar-17
Apr-17
May-17
Jun-17

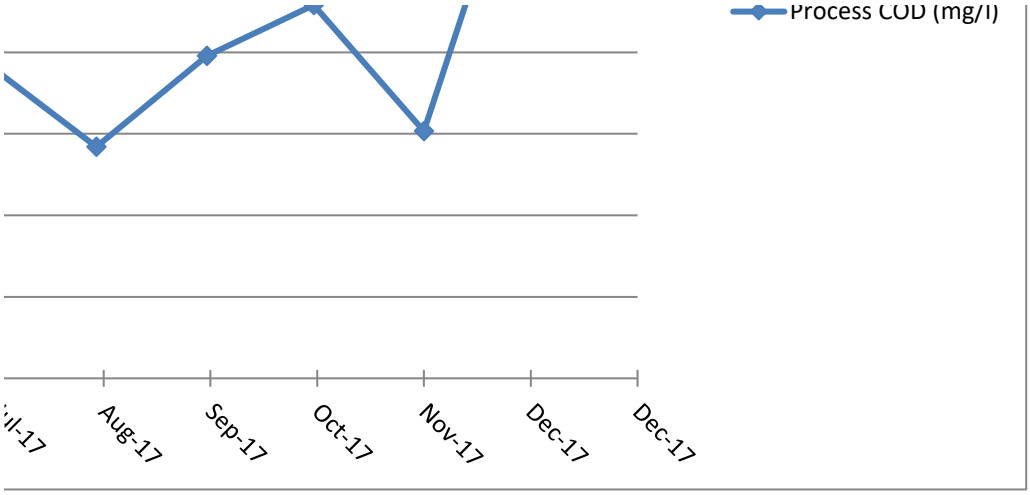

2017 Outfall
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
Dec-16
Jan-17
Feb-17
Mar-17
Apr-17
May-17
Jun-17

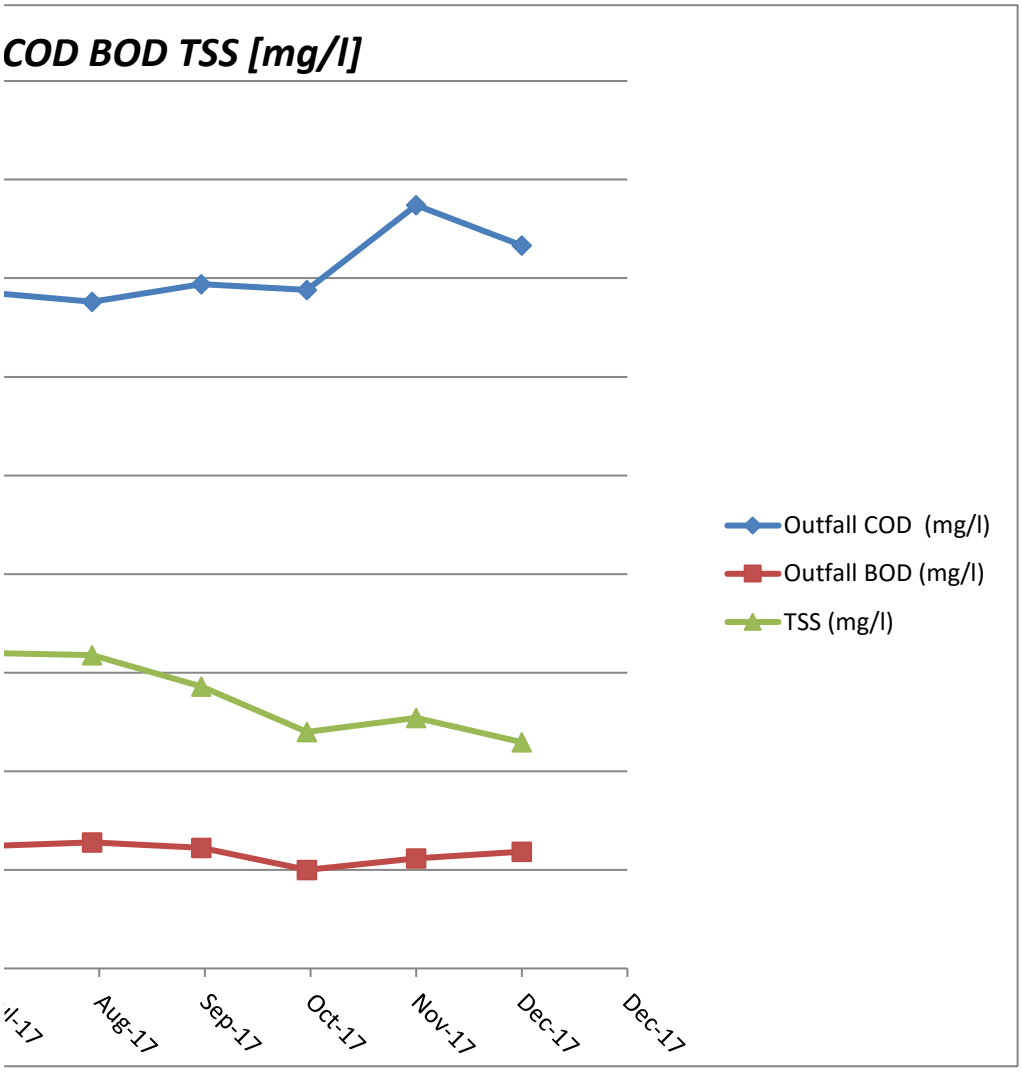
TAL REPORT 2017

WWTP		
TSS (mg/l)	Process COD (mg/l)	Effluent volume (m3/ton flour)
11.1	2,110.0	3.4
10.5	1,725.3	3.7
12.9	1,942.7	3.8
16.0	1,923.4	3.7
13.7	2,094.7	4.2
15.5	1,835.7	4.3
16.0	1,886.8	3.8
15.9	1,784.2	4.2
14.3	1,895.5	4.1
12.0	1,958.2	3.2
12.7	1,803.1	4.1
11.5	2,201.7	3.8
13.5	**1,930.1**	**3.9**
8.5	**2,097.7**	**4.4**
7.7	**2,410.1**	**5.2**
10.5	**2232.8**	**6.1**
	1550.0	**5.1**
	<2097.7	**<4.4**

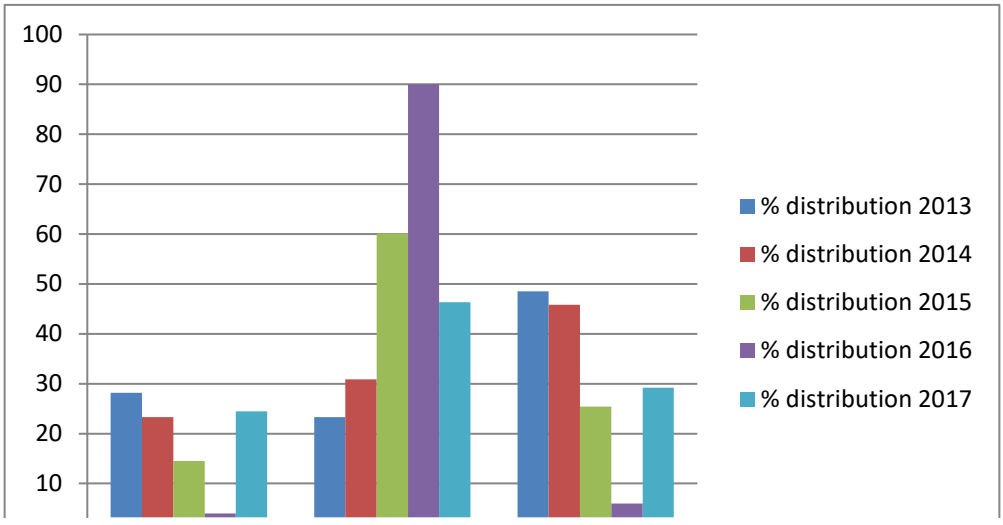
Monthly Average 2016 -
Running Monthly Average 2017 -
% distribution 2013
% distribution 2014
% distribution 2015
% distribution 2016
% distribution 2017

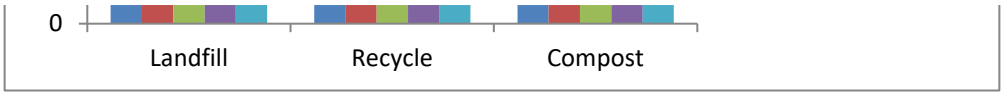



Process COD (mg/l)
Aug-17
Sep-17
Oct-17
Nov-17
Dec-17
Dec-17


COD BOD TSS [mg/l]
Outfall COD (mg/l)
Outfall BOD (mg/l)
TSS (mg/l)
Aug-17
Sep-17
Oct-17
Nov-17
Dec-17
Dec-17

WASTE			
Landfill (kg)	Recycle (kg)	Composting (kg)	emission (ton)
7260	21866	6860	4,194
2400	11525	5720	3,798
2800	7410	3360	3,932
5620	24480	5740	4,216
15640	19860	12140	4,198
14020	6849	1500	4,041
9560	15258	9160	4,269
5080	11230	6380	4,182
3000	14345	15120	3,996
7880	6560	14080	4,357
6880	19200	14760	4,151
4840	2500	6740	4,424
84980.00	**161083.00**	**101560.00**	**49757.10**
52430.00	**1088137.0**	**68080.0**	**46508.12**
47310.00	**196103.0**	**82860.00**	**42206.09**
48200.0	**63856.0**	**94790.0**	**40559.1**
43760.0	**36219.5**	**75400.0**	**3501.5**
<20%	**>32%**	**NA**	
4369	**90678**	**5673**	
7082	**13424**	**8463**	
28	**23**	**49**	
23	**31**	**46**	
15	**60**	**25**	
4	**90**	**6**	
24	**46**	**29**	





	Landfill	Recycle	Compost
% distribution 2013	28	23	49
% distribution 2014	23	31	46
% distribution 2015	15	60	25
% distribution 2016	4	90	6
% distribution 2017	24	46	29

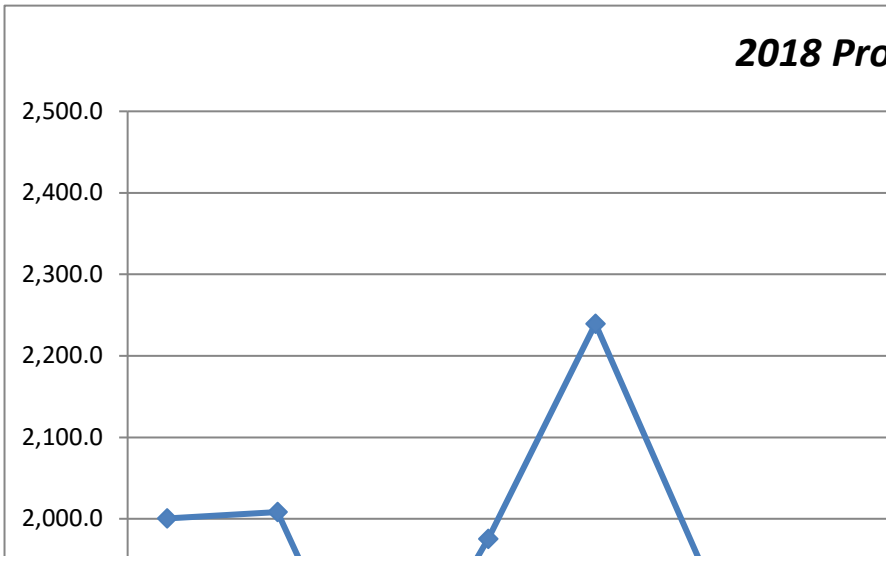
CO2		ENERGY
allocation (ton)	difference (ton)	gross energy consumption (kwh/tonne of wheat)
2,227	1,967	990.8
2,227	1,571	1094.5
2,227	1,705	1037.0
2,227	1,989	1017.3
2,227	1,971	1107.0
2,227	1,814	993.0
2,227	2,042	968.8
2,227	1,955	932.4
2,227	1,769	933.6
2,227	2,130	921.1
2,227	1,924	967.0
2,227	2,197	929.0
26724.00	**23033.10**	**991.0**
27216.00	**19292.12**	**1118.0**
27720.08	**14486.01**	**1148.3**
33864.0	**6695.1**	**1247.8**
		1312.2
<4000		**<1110.5**

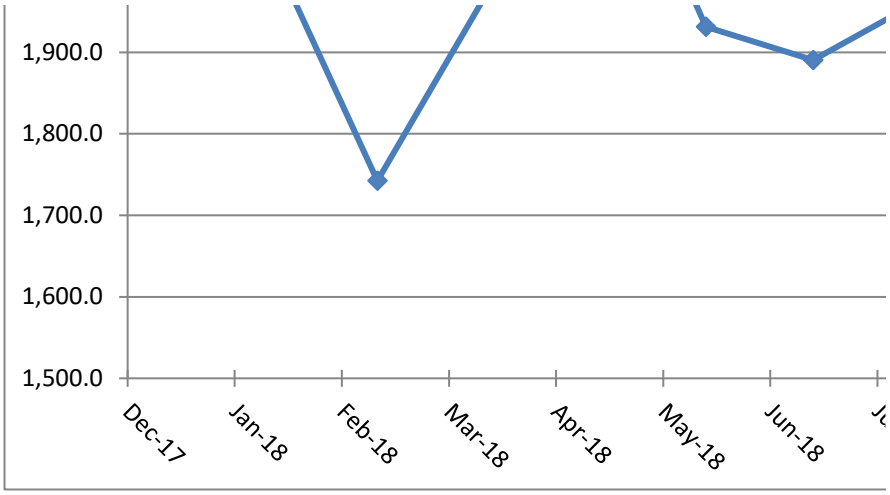
WATER
total water consumed (smc/tonne of wheat)
3.4
3.7
3.8
3.8
4.2
3.5
3.7
4.0
3.9
3.7
3.9
3.5
3.7
4.3
4.9
5.8
4.7
<4.2

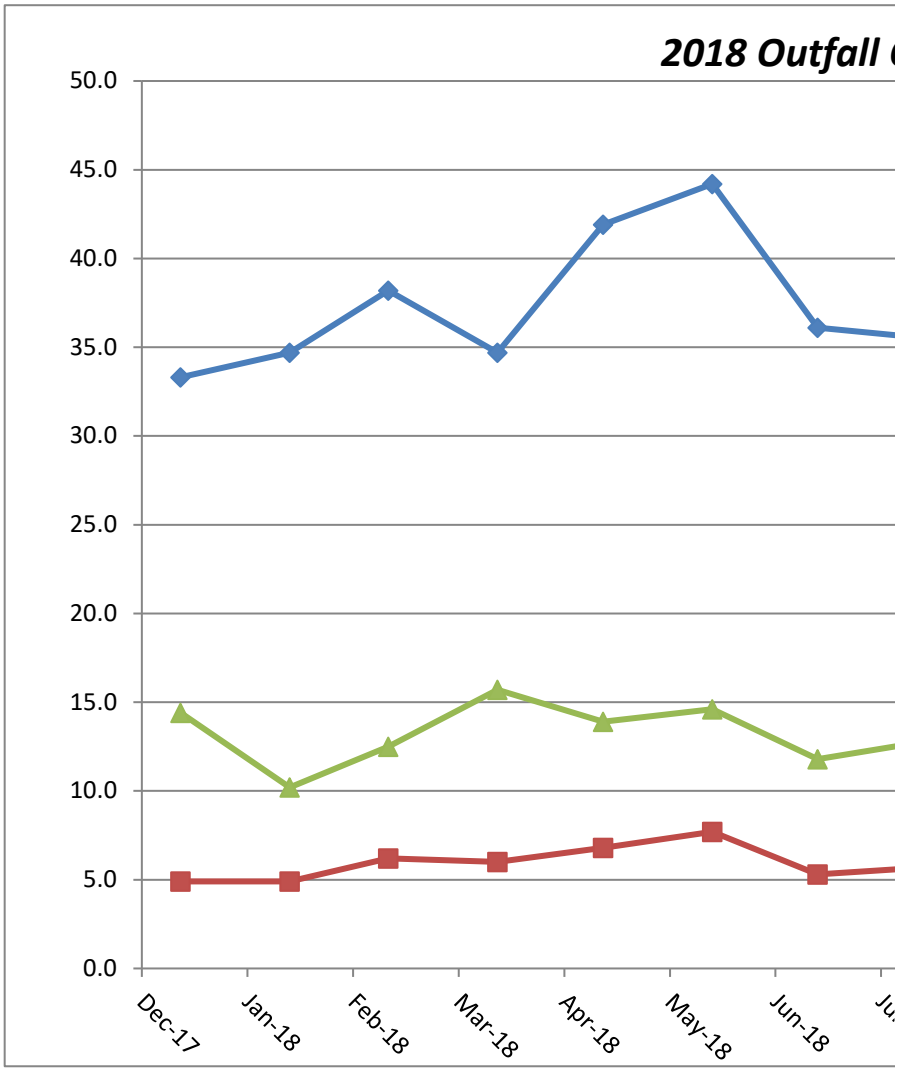
		COMPLAINTS				SUGGESTIONS
	Wheat (grind)	Dust	noise	odour	others	
Jan-18	22,393	0	0	0	0	0
Feb-18	20,842	0	0	0	0	0
Mar-18	22,749	0	0	0	0	0
Apr-18	19,731	0	0	0	0	0
May-18	23,064	0	0	0	0	0
Jun-18	19,902	0	0	0	0	0
Jul-18	21,895	0	0	0	0	0
Aug-18	21,286	0	0	0	0	0
Sep-18	22,124	0	0	0	0	0
Oct-18	21,147	0	0	0	0	0
Nov-18	22,060	0	0	0	0	0
Dec-18	22,294	0	0	0	0	0
total 2018	**259,486**	**0**	**0**	**0**	**0**	**0**
total 2017	**236,270**	**0**	**0**	**1**	**0**	**2**
total 2016	**196,993**	**0**	**0**	**1**	**0**	**2**
total 2015	**172,568**	**0**	**0**	**0**	**0**	**0**
total 2014	**153,022**	**0**	**0**	**0**	**0**	**2**
target	**-**	**0**				**3**

SEDALCOL ENVIRONMENTAL REPORT 2018

INCIDENTS	CAR		
	(External)	Outfall COD (mg/l)	Outfall BOD (mg/l)
1	3	33.3	4.9
0	0	34.7	4.9
4	0	38.2	6.2
3	0	34.7	6.0
0	0	41.9	6.8
3	1	44.2	7.7
1	2	36.1	5.3
0	0	35.5	5.7
0	1	33.2	4.5
2	1	31.9	5.4
3	0	36.6	8.2
1	0	32.7	3.9
18	**8**	**36.1**	**5.8**
21	**7**	**34.6**	**6.2**
15	**8**	**29.9**	**5.9**
13	**8**	**31.5**	**6.1**
20	**9**	**32.4**	**6.2**
-	-	<30	<6.0

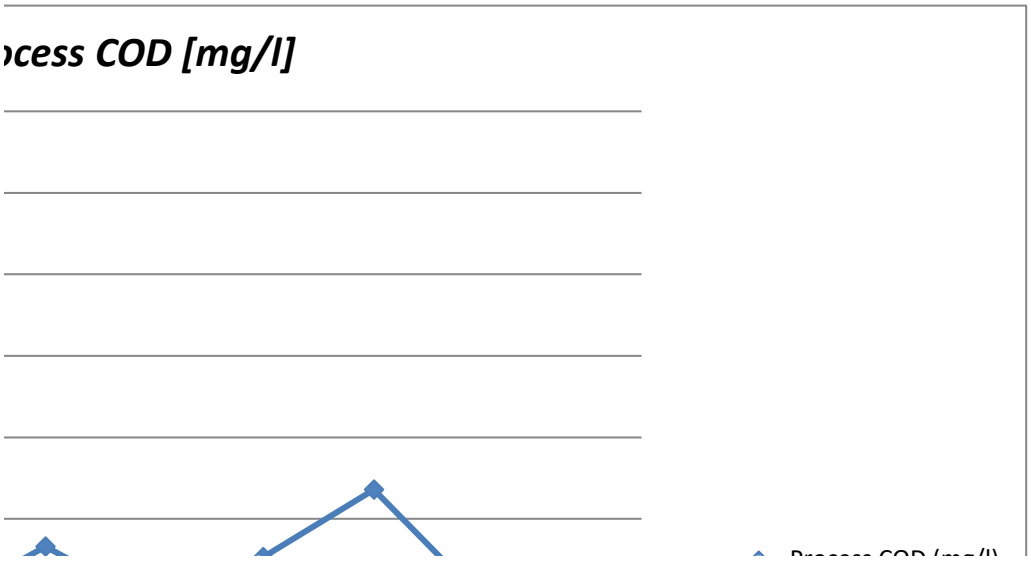


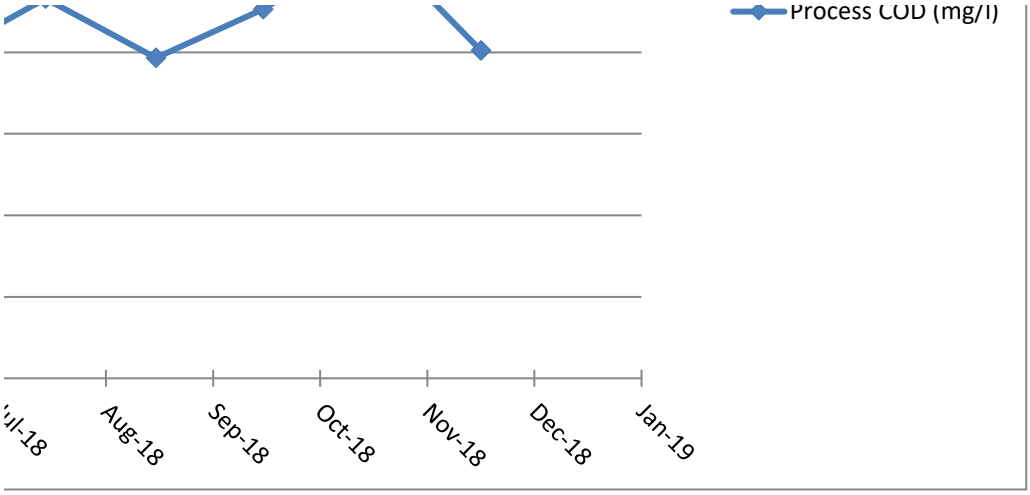

1,900.0
1,800.0
1,700.0
1,600.0
1,500.0
Dec-17
Jan-18
Feb-18
Mar-18
Apr-18
May-18
Jun-18

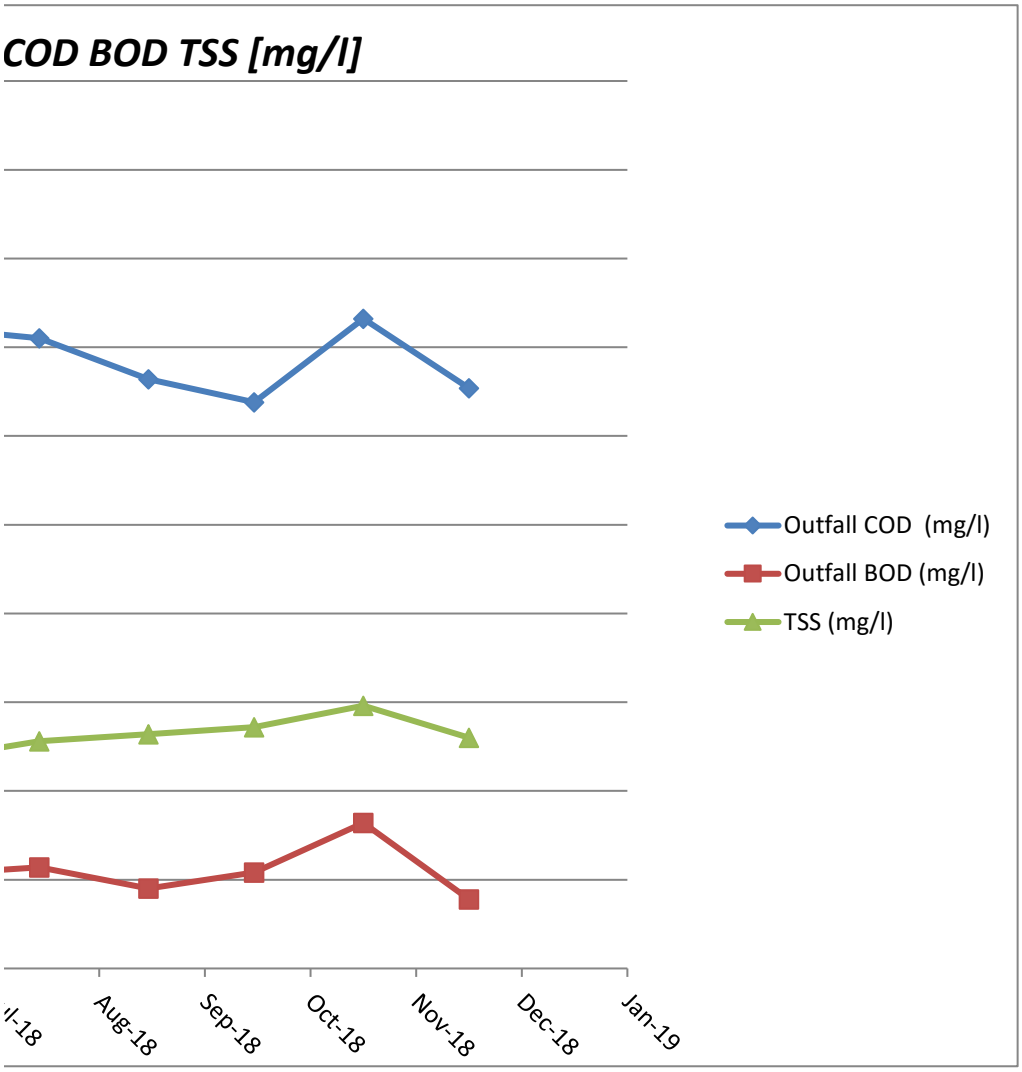

2018 Outfall
50.0
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
Dec-17
Jan-18
Feb-18
Mar-18
Apr-18
May-18
Jun-18

WWTP		
TSS (mg/l)	Process COD (mg/l)	Effluent volume (m3/ton flour)
14.4	2,000.3	3.8
10.2	2,008.3	3.7
12.5	1,742.3	3.8
15.7	1,975.5	4.4
13.9	2,239.4	4.2
14.6	1,931.2	4.4
11.8	1,890.4	4.2
12.8	1,965.9	4.5
13.2	1,893.1	4.3
13.6	1,953.0	4.6
14.8	2,035.8	4.0
13.0	1,902.1	3.7
13.4	**1,961.4**	**4.1**
13.5	**1,930.1**	**3.9**
8.5	**2,097.7**	**4.4**
7.7	**2,410.1**	**5.2**
10.5	**2232.8**	**6.1**
	<2000	**<4.2**

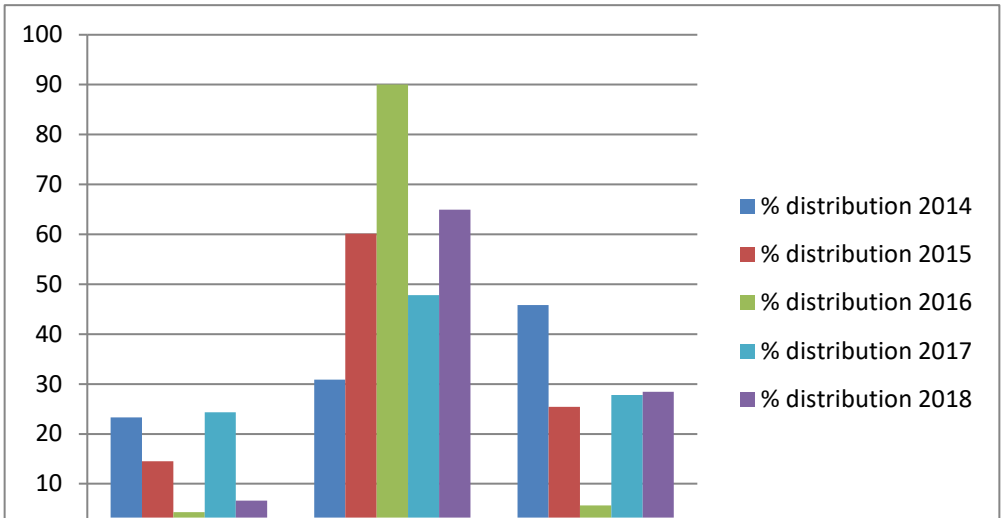
Monthly Average 2017 -
Running Monthly Average 2018 -
% distribution 2014
% distribution 2015
% distribution 2016
% distribution 2017
% distribution 2018

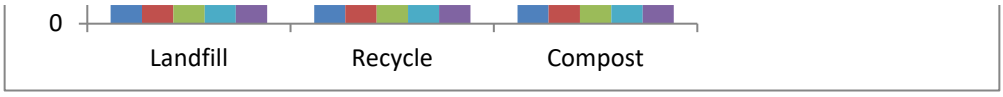



Process COD (mg/l)
Aug-18
Sep-18
Oct-18
Nov-18
Dec-18
Jan-19


COD BOD TSS [mg/l]
Outfall COD (mg/l)
Outfall BOD (mg/l)
TSS (mg/l)
Aug-18
Sep-18
Oct-18
Nov-18
Dec-18
Jan-19

WASTE			
Landfill (kg)	Recycle (kg)	Composting (kg)	emission (ton)
780	33781	13820	4,411
2840	7600	7000	4,118
0	4918	6440	4,457
9540	17660	11460	3,906
1860	12203	11920	4,319
1772	6828	8540	3,927
780	14929	9680	4,158
0	11484	10240	4,119
1780	32630	9960	4,191
4640	9477	10280	4,246
1680	105080	9620	4,173
1820	13838	9500	4,343
27492	**270428**	**118460**	**50367.40**
84980	**161083**	**101560**	**45333.60**
52430	**1088137**	**68080**	**46508.12**
47310	**196103**	**82860**	**42206.09**
48200	**63856**	**94790**	**40559.1**
<20%	**>34%**	**NA**	
7082	**13424**	**8463**	
2291	**22536**	**9872**	
23	**31**	**46**	
15	**60**	**25**	
4	**90**	**6**	
24	**46**	**29**	
6.6	**64.9**	**28.4**	





	Landfill	Recycle	Compost
% distribution 2014	23	31	46
% distribution 2015	15	60	25
% distribution 2016	4	90	6
% distribution 2017	24	48	28
% distribution 2018	7	65	28

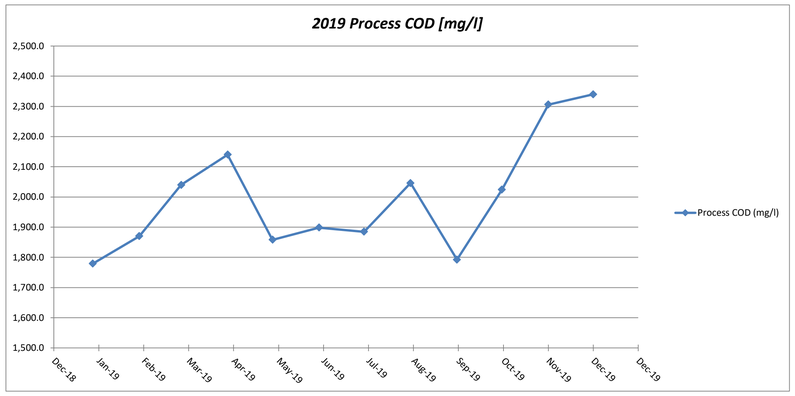
CO2		ENERGY
allocation (ton)	difference (ton)	gross energy consumption (kwh/tonne of wheat)
2,185	2,226	924.4
2,185	1,933	926.2
2,185	2,272	916.6
2,185	1,721	928.7
2,185	2,134	876.1
2,185	1,742	926.0
2,185	1,973	886.3
2,185	1,934	909.1
2,185	2,006	882.6
2,185	2,061	940.7
2,185	1,988	886.0
2,185	2,158	912.5
26220.00	**24147.40**	**909.6**
26724.00	**18609.60**	**991.0**
27216.00	**19292.12**	**1118.0**
27720.08	**14486.01**	**1148.3**
33864.0	**6695.1**	**1247.8**
		<1073

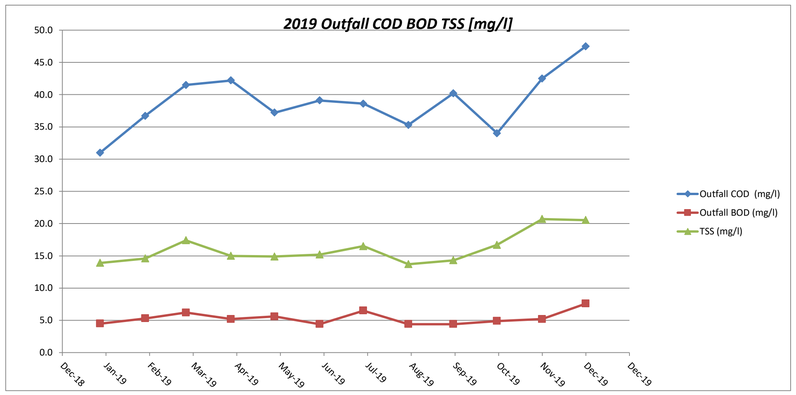
WATER
total water consumed (smc/tonne of wheat)
3.5
3.2
3.4
4.0
4.0
4.3
4.2
4.3
4.1
4.4
3.7
3.5
3.9
3.7
4.3
4.9
5.8
<4.13

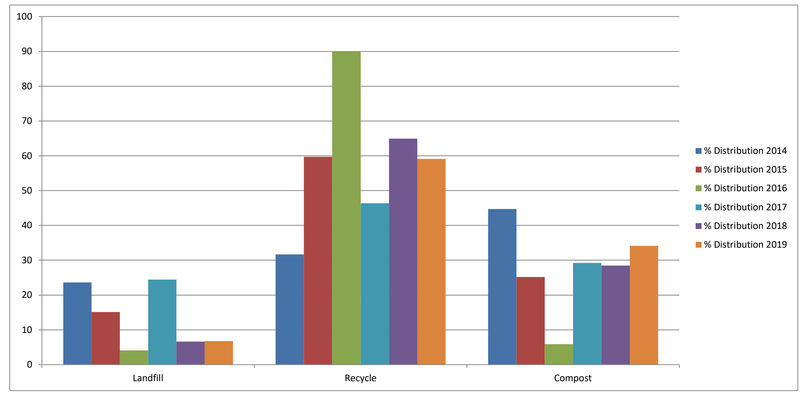
SEDAMYL ENVIRONMENTAL REPORT 2019

		COMPLAINTS				SUGGESTIONS	INCIDENTS	CAR	WWTP					WASTE			CO2			ENERGY	WATER
	Wheat (grind)	Dust	Noise	Odour	Others			(External)	Outfall COD (mg/l)	Outfall BOD (mg/l)	TSS (mg/l)	Process COD (mg/l)	Effluent volume (m3/ton flour)	Landfill (kg)	Recycle (kg)	Composting (kg)	Emission (ton)	Allocation (ton)	Difference (ton)	Gross Energy Consumption (kwh/tonne of wheat)	Total Water Consumed (smc/tonne of wheat)
Jan-19	22,387	0	0	0	0	0	1	0	31.0	4.5	13.9	1,779.0	4.2	1940	11040	9060	4,354	2,143	2,211	912.5	5.3
Feb-19	19,891	0	0	0	0	0	0	0	36.7	5.3	14.6	1,870.0	4.1	0	6009	8420	3,763	2,143	1,620	887.1	5.2
Mar-19	20,382	0	0	0	0	0	0	0	41.5	6.2	17.4	2,040.0	3.9	2280	90825	9580	3,847	2,143	1,704	886.5	4.9
Apr-19	22,550	0	0	0	0	0	1	0	42.2	5.2	15.0	2,140.0	3.7	5000	32304	10040	4,157	2,143	2,014	864.5	4.8
May-19	20,910	0	0	0	0	1	3	1	37.2	5.6	14.9	1,858.0	4.8	3320	4150	11140	4,109	2,143	1,966	922.7	6.1
Jun-19	22,308	0	0	0	0	0	1	0	39.1	4.4	15.2	1,898.6	4.3	1660	15901	8240	4,127	2,143	1,984	868.2	5.3
Jul-19	23,462	0	0	0	0	0	1	0	38.6	6.5	16.5	1,884.6	4.6	1760	14000	15980	4,140	2,143	1,997	827.2	5.8
Aug-19	22,729	0	0	0	0	0	1	0	35.3	4.4	13.7	2,046.0	4.4	0	2388	9820	4,125	2,143	1,982	852.2	5.6
Sep-19	21,589	0	0	0	0	0	0	0	40.2	4.4	14.3	1,792.4	4.4	2240	16095	1500	4,131	2,143	1,988	898.3	5.4
Oct-19	23,003	0	0	0	0	0	2	0	34.0	4.9	16.7	2,024.2	4.7	1860	4210	17480	4,268	2,143	2,125	871.2	5.4
Nov-19	24,179	0	0	0	0	0	0	0	42.5	5.2	20.7	2,306.1	3.9	1880	8265	15660	4,319	2,143	2,176	838.5	4.5
Dec-19	22,098	0	0	0	0	0	0	0	47.5	7.6	20.5	2,340.1	3.9	3340	15660	10620	4,233	2,143	2,090	898.6	4.9
Total 2019	**265,487**	**0**	**0**	**0**	**0**	**1**	**10**	**1**	**38.8**	**5.3**	**16.1**	**1,998.3**	**4.2**	**25280**	**220847**	**127540**	**49571.90**	**25716.00**	**23855.90**	**877.3**	**5.3**
Total 2018	259,486	0	0	0	0	0	18	8	36.1	5.8	13.4	1,961.4	4.1	27492	270428	118460	50367.40	26220.00	24147.40	909.60	3.87
Total 2017	236,270	0	0	1	0	2	21	7	34.6	6.2	13.5	1,930.1	3.9	84980	161083	101560	49757.10	26724.00	23033.10	990.96	3.74
Total 2016	196,993	0	0	1	0	2	15	8	29.9	5.9	8.5	2,097.7	4.4	50580	1118328	72860	46508.12	27216.00	19292.12	1118.04	4.29
Total 2015	172,568	0	0	0	0	0	13	8	31.5	6.1	7.7	2,410.1	5.2	49690	196453	82760	42206.09	27720.08	14486.01	1148.26	4.85
Total 2014	153,022	0	0	0	0	2	20	9	32.4	6.2	10.5	2,232.8	6.1	50840	68211	96260	40559.10	33864.00	6695.10	1247.78	5.77
Target		**0**				**3**	**0**	**-**	**< 30**	**< 6.0**		**< 2000**	**< 4.1**	**< 18%**	**> 45%**	**-**				**< 1030**	**< 4.05**

Monthly Average 2018	**2291**	**22536**	**9872**
Running Monthly Average 2019	**2107**	**18404**	**10628**
% Distribution 2014	24	32	45
% Distribution 2015	15	60	25
% Distribution 2016	4	90	6
% Distribution 2017	24	46	29
% Distribution 2018	7	65	28
% Distribution 2019	**6.8**	**59.1**	**34.1**



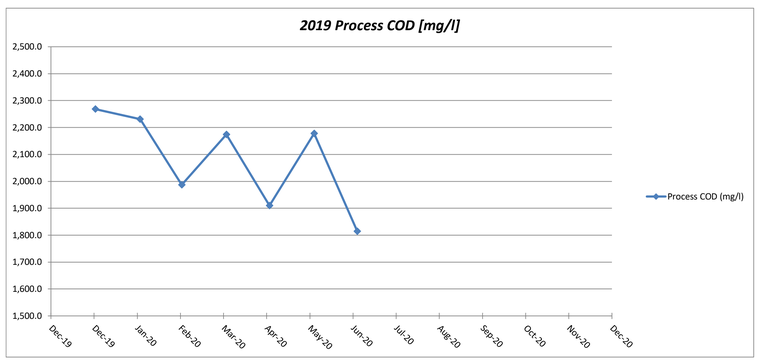


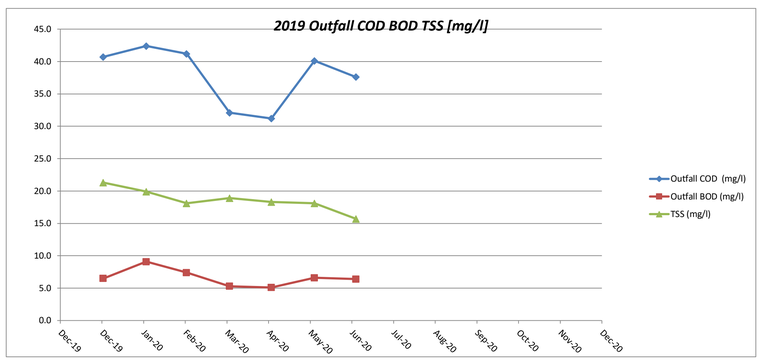


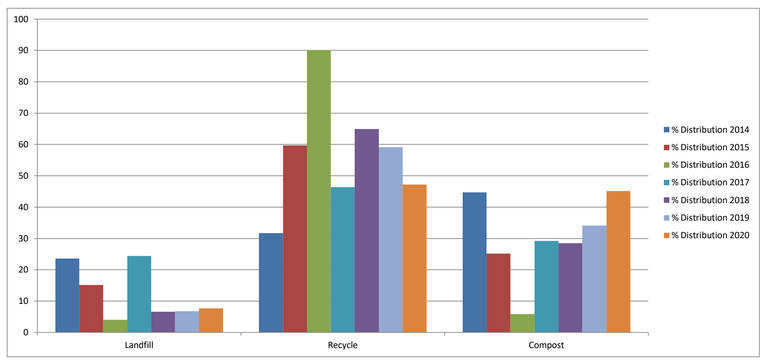
SEDAMYL ENVIRONMENTAL REPORT 2020

		COMPLAINTS				SUGGESTIONS	INCIDENTS	CAR	WWTP					WASTE			CO2			ENERGY	WATER
	Wheat (grind)	Dust	Noise	Odour	Others			(External)	Outfall COD (mg/l)	Outfall BOD (mg/l)	TSS (mg/l)	Process COD (mg/l)	Effluent volume (m3/ton flour)	Landfill (kg)	Recycle (kg)	Composting (kg)	Emission (ton)	Allocation (ton)	Difference (ton)	Gross Energy Consumption (kwh/tonne of wheat)	Total Water Consumed (smc/tonne of wheat)
Jan-20	22,615	0	0	0	0	0		0	40.7	6.5	21.3	2,268.0	4.8	0	19842	13220	4,338	2,143	2,195	900.3	4.8
Feb-20	22,330	0	0	0	0	0		0	42.4	9.1	19.9	2,231.0	2.1	2580	13235	6800	4,300	2,143	2,157	873.1	2.1
Mar-20	24,589	0	0	0	0	0		0	41.2	7.4	18.1	1,987.0	1.4	3013	17655	10220	4,171	2,143	2,028	823.4	1.4
Apr-20	23,754	0	0	0	0	0		0	32.1	5.3	18.9	2,174.0	4.3	0	1250	8880	4,138	2,143	1,995	816.8	4.3
May-20	22,966	0	0	0	0	0		0	31.2	5.1	18.3	1,910.0	4.9	760	8535	10100	4,147	2,143	2,004	846.2	4.9
Jun-20	24,017	0	0	0	0	0		0	40.1	6.6	18.1	2,178.0	4.7	2820	2415	9380	4,229	2,143	2,086	824.6	4.7
Jul-20									37.6	6.4	15.7	1,814.0		1760	4040	5420					
Aug-20																					
Sep-20																					
Oct-20																					
Nov-20																					
Dec-20																					
Total 2020	**140,271**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**37.9**	**6.6**	**18.6**	**2,080.3**	**3.7**	**10933**	**66972**	**64020**	**25323.60**	**12858.00**	**12465.60**	**847.4**	**3.7**
Total 2019	265,487	0	0	0	0	1	10	1	38.8	5.3	16.1	1,998.3	4.2	25280	220847	127540	49571.90	25716.00	23855.90	877.30	5.26
Total 2018	259,486	0	0	0	0	0	18	8	36.1	5.8	13.4	1,961.4	4.1	27492	270428	118460	50367.40	26220.00	24147.40	909.60	5.26
Total 2017	236,270	0	0	1	0	2	21	7	34.6	6.2	13.5	1,930.1	3.9	84980	161083	101560	49757.10	26724.00	23033.10	990.96	3.74
Total 2016	196,993	0	0	1	0	2	15	8	29.9	5.9	8.5	2,097.7	4.4	50580	1118328	72860	46508.12	27216.00	19292.12	1118.04	4.29
Total 2015	172,568	0	0	0	0	0	13	8	31.5	6.1	7.7	2,410.1	5.2	49690	196453	82760	42206.09	27720.08	14486.01	1148.26	4.85
Total 2014	153,022	0	0	0	0	2	20	9	32.4	6.2	10.5	2,232.8	6.1	50840	68211	96260	40559.10	33864.00	6695.10	1247.78	5.77
Target		**0**				**3**	**0**	**-**	**<30**	**<6.0**		**<2000**	**<4.1**	**<10%**	**>60%**	**-**				**<1000**	**<4.05**

Monthly Average 2019	**2107**	**18404**	**10628**
Running Monthly Average 2019	**1562**	**9567**	**9146**
% Distribution 2014	24	32	45
% Distribution 2015	15	60	25
% Distribution 2016	4	90	6
% Distribution 2017	24	46	29
% Distribution 2018	7	65	28
% Distribution 2019	7	59	34
% Distribution 2020	**7.7**	**47.2**	**45.1**







SEDALCOL 2017 ENVIRONMENTAL KPI TARGETS	
	2016 results
Complaints	1
Suggestions	2
Incidents	15
Outfall COD (mg/l)	29.9
Outfall BOD (mg/l)	5.9
Process COD (mg/l)	2097.7
Effluent volume (m3/ton flour)	4.4
Landfill (%total)	4
Recycle (%total)	90
Composting (%total)	6
Gross energy consumption (kwh/tonne of wheat)	1118.0
Total water consumed (smc/tonne of wheat)	4.3

SEDALCOL 2018 ENVIRONMENTAL KPI TARGETS	
	2017 results
Complaints	1
Suggestions	2
Incidents	21
Outfall COD (mg/l)	34.6
Outfall BOD (mg/l)	6.2
Process COD (mg/l)	1930.1
Effluent volume (m3/ton flour)	3.9
Landfill (%total)	24
Recycle (%total)	46
Composting (%total)	29
Gross energy consumption (kwh/tonne of wheat)	991.0
Total water consumed (smc/tonne of wheat)	3.7

SEDALCOL 2019 ENVIRONMENTAL KPI TARGETS	
	2018 Results
Complaints	0
Suggestions	0
Incidents	18
Outfall COD (mg/l)	36.1

Outfall BOD (mg/l)	5.8
Process COD (mg/l)	1961.4
Effluent volume (m3/ton flour)	4.1
Landfill (%total)	7
Recycle (%total)	65
Composting (%total)	28
Gross energy consumption (kwh/tonne of wheat)	909.6
Total water consumed (smc/tonne of wheat)	3.9

SEDAMYL 2020 ENVIRONMENTAL KPI TARGETS	
	2019 Results
Complaints	0
Suggestions	1
Incidents	10
Outfall COD (mg/l)	38.8
Outfall BOD (mg/l)	5.3
Process COD (mg/l)	1998.3
Effluent volume (m3/ton flour)	4.2
Landfill (%total)	7
Recycle (%total)	59
Composting (%total)	34
Gross energy consumption (kwh/tonne of wheat)	877.3
Total water consumed (smc/tonne of wheat)	5.3

SEDAMYL 2021 ENVIRONMENTAL KPI TARGETS	
	2020 Results
Complaints	0
Suggestions	0
Incidents	0
Outfall COD (mg/l)	37.9
Outfall BOD (mg/l)	6.6
Process COD (mg/l)	2080.3
Effluent volume (m3/ton flour)	3.7
Landfill (%total)	7
Recycle (%total)	65
Composting (%total)	28

Gross energy consumption (kwh/tonne of wheat)	847.4
Total water consumed (smc/tonne of wheat)	3.7

2017 targets	
0	
10	
-	
<30	
<6.0	
<2097.7	
<4.4	
<20%	
>32%	
NA	
<1110.5	-2% *on 2016 results
<4.2	-2% *on 2016 results

2018 targets	
0	
3	+1 compared previous year
-	
<30	
<6.0	
<2000	-2% *on 2017 targets
<4.2	
<20	
>34	+2% *on 2017 targets
NA	
<1073	-4% *on 2016 results
<4.13	-4% *on 2016 results

2019 Targets	
0	-
3	
0	-
< 30	

< 6.0	-
< 2000	
< 4.1	- 2.5% on 2018 result
< 18%	- 10% on previous target
> 45%	+ 11% on previous target
-	-
< 1030	- 4% on previous target
< 4.05	- 2% on previous target

2020 Targets	
0	-
3	-
0	-
<30	-
<6.0	-
<2000	-
<4.1	-
<10%	-
>60%	-
-	-
<1000	- 3% on previous target
<4.05	-

2021 Targets	

	2014	2015
Complaints	0	0
Suggestions	2	0
Incidents	20	13
Outfall COD (mg/l)	32.4	31.5
Outfall BOD (mg/l)	6.2	6.1
Process COD (mg/l)	2232.8	2410.1
Effluent volume (m3/ton flour)	6.1	5.2
Landfill (%total)	23	15
Recycle (%total)	31	60
Composting (%total)	46	25
Gross energy consumption (kwh/tonne of wheat)	1247.8	1148.3
Total water consumed (smc/tonne of wheat)	5.8	4.9

2016	2017	2018	2019
1	1	0	0
2	2	0	1
15	21	18	10
29.9	34.6	36.1	38.8
5.9	6.2	5.8	5.3
2097.7	1930.1	1961.4	1998.3
4.4	3.9	4.1	4.2
4	24	7	7
90	46	65	59
6	29	28	34
1118.0	991.0	909.6	877.3
4.3	3.7	3.9	5.3

rev.	date	title
…	…	…
0	15/05/2017	
1	04/06/2018	
2	02/10/2018	
3	05/05/2019	
4	07/01/2020	
5	18/05/2020	

notes
…

New document created

Review of the floding map and Local Air Quality Management Area outcomes for 2018
Updated to encompass ISO 50001 requirements
Updated for IMS
Annual review and update to include changes within larger business scope (TSSE/Sedamyl)
Epidemic included following COVID-19 outbreak

Number
1
2
3
4
5
6
7

Intended Outcomes from IMS
To be certified to ISO 9001, ISO 14001, ISO 22000 and ISO 50001
To improve the company's environmental, energy, quality and food safety performance
To fulfil all applicable environmental, energy, quality and food safety compliance obligations
To protect the environment including preventing pollution and nuisance
To produce products which meet the highest standards of quality and food safety
To fulfil the company's environmental, energy, quality and food safety objectives
To maintain the confidence of interested parties

4.1	Determination of Internal & External Issues			
Internal/External Issues	**Relevance to Sedamyl**	**Opportunity Rating**	**Risk Rating**	**Actions to Mitigate Risks or Realise Opportunities**
Environmental/ Quality Conditions:				
Climate	Sea level rises from climate change may present a long-term threat, although the site is inland but within the tidal limit of the River Ouse. The Environment Agency's flood risk maps confirm the site has a medium risk of flooding from the sea or rivers and low risk from surface water flooding. It also has a risk of flooding from reservoirs. The highest recorded level of the River Ouse was 5.99m in December 2015 when the site was around 40cm away from being affected. Sea level rises and climatic changes may be problematic for any suppliers operating at low altitude sites as they may need to move to higher ground or protect their crops in the event of sea level rises. This may force wheat price increases due to the reduction in available arable land and increased competition to purchase available land. Changes in weather from climate change could have a negative effect on growing conditions in certain regions, which may also increase wheat prices or affect availability.	Low	Moderate	The site is signed up to the flood warning scheme operated by the Environment Agency and has an operating procedure (Flood Risk Assessment Action Plan) in place to control site activities under flood conditions. The flood defence system has been designed to withstand a1 in 100 or greater annual probability of river flooding (>1%), or a 1 in 200 or greater annual probability of flooding from the sea (>0.5%) in any year. Supply chain risks will need to be kept under observation in the medium to long term, with a shift away from suppliers with low lying sites or those that are more susceptible to the effects of climate change.
Air quality	The area of New Street in the town centre of Selby has been declared a Local Air Quality Management Area (LAQMA) due to high nitrogen dioxide levels, although this does not impact directly on company activities as the site is around 1km away from the LAQMA boundary and haulage vehicles do not use this area as a route. Discharges from the Selby site include carbon dioxide, particulates, oxides of nitrogen, hydrogen sulphide (from flaring) and VOCs. These emissions are controlled via bag filters, dust monitoring alarms (filter failure detectors) and scrubbers, and participation in the EU ETS (emissions trading scheme). In rare circumstances, particulate emissions can exceed the limits set within the permit on a short-term basis due to e.g. bag failures but these are alarmed and maintained quickly. Multiple heavy goods vehicle movements occur to and from the site on a daily basis which contribute to local, national and international air quality problems. There are also emissions from staff commuting and business travel, including company cars. These are controlled via the increased price of fuel and regular servicing of vehicles in use.	Low	Moderate	Monitor Selby District Council's Local Air Quality Management Plan occasionally for relevance to company activities. Continue to operate air pollution control equipment in line with the requirements of the environmental permit (i.e. best available techniques). Continue to use the A63 for haulage purposes and avoid the town centre.

Internal/External Issues	Relevance to Sedamyl	Opportunity Rating	Risk Rating	Actions to Mitigate Risks or Realise Opportunities
Environmental/ Quality Conditions:				
Water quality	The site discharges treated effluent to the River Ouse under a discharge consent which is operated under the terms of the environmental permit. The consent covers BOD, total suspended solids, flow rates, hydrocarbon oils and temperature. The site operates within the prescribed discharge limits and is comfortable in its ability to maintain compliance, albeit this requires internal management for suspended solids and temperature. The site also discharges domestic foul effluent to foul sewers but no industrial effluent hence there is no need for a trade effluent consent from Yorkshire Water. The company uses borehole water in the process so water quality is of particular importance to protect product quality. The site currently uses water treatment equipment to remove metals which cause corrosion and blockage of filters and pipelines. Borehole water is taken from 4 on-site boreholes and 3 off-site boreholes. Three boreholes are used for process and are stored in a dedicated tank which is monitored on a daily basis for pH and conductivity. Mains water temperature is checked on a monthly basis to avoid legionella formation and cooling towers are tested bi-monthly for the presence of legionella.	Low	Moderate	The site has a water treatment plant on site which is closely monitored against the requirements of the consent/permit. It also has ultra filtration plant available in case of elevated suspended solids, although this rarely needs to be used. An Environmental Water Management Procedure defines the monitoring regime and a suite of SSOPs is in place for the waste water treatment plant. Borehole water is analysed on a quarterly basis using external laboratory analysis and on a daily basis for pH and conductivity.
Land use	Land use at the site has no known issues due to subsidence, etc.	Low	Low	N/A.
Existing contamination	The site has some low level asbestos contamination which is strictly controlled and monitored using the site asbestos register.	Low	Low	Continued treatment and management of low level asbestos contamination.
Natural resource availability	Grain suppliers are abundant with the UK being a major producer, therefore continuity is deemed to be low risk. Prices fluctuate according to the global grain market and volatility is managed via close management. Wheat is still believed to be the best source for starch considering the area where the plant is situated and the economical profit given by the proteins extraction. Transportation of product/people and energy supply (natural gas) are still reliant on fossil fuels which are a long-term risk due to the depleting supplies of fossil fuels which are a finite resource. The site contributes to the national grid via export of surplus electricity in exchange for payment. Biogas from waste water treatment is a possible long term opportunity for the site.	Moderate	Low	The site has a CHP plant which produces electricity and exports surplus electricity to the national grid in times of surplus. It also uses the TRIAD system to minimise imports and maximise exports to the grid. The potential for a biogas plant/biogas powered boiler unit is being monitored via production levels and economic conditions.
Biodiversity	There is some evidence of wildlife on site (e.g. deer, nesting birds, stoats, weasels) however none are known to be protected. An ecological survey was undertaken at the time of site occupation however no issues were raised through this.	Low	Low	N/A.
Epidemic	A localised or worldwide epidemic (SARS/COVID-19) is unpredictable and difficult to plan for a scenario. Given the products produced we are we placed to remain operational should the supply chain and infrastructure allow us to do so. Strict controls would be needed throughout the workforce given the lean structure.	Moderate	Moderate	N/A.
Cultural	Cultural issues are not seen as a particular source of threat or opportunity.	Low	Low	N/A.
Social	No social issues identified as relevant.	Low	Low	N/A.

Internal/External Issues	Relevance to Sedamyl	Opportunity Rating	Risk Rating	Actions to Mitigate Risks or Realise Opportunities
Environmental/ Quality Conditions:				
Political	Brexit implications aren't clear yet and so a scenario difficult to imagine. Brexit is pushing our existing customer but also new and potential customers to look for UK based manufacturer as Sedamyl UK rather than importing from the EU (time, custom, duty implications). The only raw material (Wheat) is sourced locally from within the UK. Some of our supplies (process aids, components) are sourced form outside the UK and Brexit has the potential to impact on those.	Moderate	Moderate	Sedamyl SBE has been formed to take care of sales and direct production in a timely, cost effective way taking into account transport cost associated and lead delivery time between the two sites. To mitigate issues that an hard Brexit might cause with deliveries from the continent, Sedamyl UK increased its stock of critical process aids and components/spare.
Legal/Regulatory	The Environment Agency works closely with the site as part of its environmental permit and the Local Authority visits site to help manage nuisance, food safety and environmental health, etc. The HSE also visits site to manage legionella risks.	Low	High	Compliance with the environmental permit and legal requirements is closely managed via the external and internal audit programme, the site's IMS and day-to-day operational and monitoring procedures.
Financial	Cost pressures due to rising costs of raw materials and fossil fuels, which the company depends on for its income.	Low	Low	Long term contracts with critical customers, with product prices formula to take in consideration raw material and fossil fuels cost variation.
Technological	Improvements in technology can help in terms of reducing environmental impact and maximising efficiency of production and resource use.	High	Low	Close monitoring of available technologies via benchmarking, networking, research and dialogue with suppliers and industry groups.
Economic	The company operates in a relatively stable market so economic condition present minimal risk or opportunity.	Low	Low	N/A.
Natural	The availability of wheat is the key variable that affects the company, particularly in terms of quality and/or safety (e.g. mycotoxins content). This has limited impact on the intended outcomes from an environmental point of view, but might severely impact quality side.	Moderate	Moderate	There is limited opportunity to mitigate this risk at reasonable cost. Close monitoring through sampling of incoming raw material at intake. Import of wheat from foreign countries is considered as a solution, even if when considered in previous occasions, it wasn't economically viable.
Competitive Circumstances	Maintenance of ISO standards is protecting the company's market position, quality and environmental management is seen as a positive by key customers.	Moderate	Moderate	Continue to maintain ISO certifications and improve the site's performances through continued investment, culture and focus.
Activities	No particular relevance.	Low	Low	N/A.
Services	No particular relevance.	Low	Low	N/A.
Strategic Direction	The company's strategic direction is determined by the Sedamyl Group and local management with environmental issues seen as a key component to the strategy.	Moderate	Moderate	Continued focus on environmental management at the strategic level.
Culture	Company culture is strong and proactive, so there are no particular issues of concern.	Moderate	Low	Continued encouragement of staff participation and proactive approach on key issues.
Capabilities	No particular relevance.	Low	Low	N/A.

4.2 Determination of Interested Parties' Needs & Expectations

Interested Parties	Needs/Expectations	Compliance Obligation?
Employees	Staff expect to receive sufficient training, welfare, remuneration and support from the company and for the company to play its part by addressing product and service quality, environmental and energy issues to protect the business and support profitability. The company expects employees to play their part in contributing to enhanced product and service quality, environmental and energy performance and complying with legal obligations. The company shares its monthly Quality and Environmental Report (includes energy) with all staff.	No.
Customers	Customers have expressed an interest in the company's environmental policy and management activity and are satisfied with the site's ISO 14001 certification and compliance status. Customers expect to be supplied with products and services of high quality, at a competitive price. This leads the company to mantain and renew its compliance with ISO 9001:2015 and FSSC 22000 certification standards.	Yes - included in Register of Compliance Obligations (ISO 9001, ISO 14001, FSSC 22000 and EFISC).
Regulatory bodies - Environment Agency, Food Standard Agency, Local Authority (Selby District Council), Health and Safety Executive, EU ETS	The Environment Agency expects the company to comply with the conditions of the environmental permit and to report any breaches promptly. Selby District Council expects the company to minimise nuisance and to mitigate any nuisance issues promptly. It also expects food/feed or premises that it is produced in pose no risk to consumers health. The Food Standard Agency expects the company to comply with food and feed legislations and to report, withdraw or recall from the market any food or feed supplied which is either harmful to health, unfit for people to eat or does not meet legal requirements. The Health and Safety Executive expects the company to comply with legislation, including those related to COSHH, legionella and asbestos and to report any potential breaches promptly. The EU ETS expects the company to provide annual returns of its carbon dioxide equivalent emissions and accept an annual audit from LRQA. The Environment Agency expects the company to participate in the Energy Savings Opportunities Scheme, which requires four-yearly energy audits or ISO 50001 certification. In addition under the Streamlined Energy and Carbon Reporting (SECR) the company must report annually an intensity metric that links emissions with an appropriate business metric or financial indicator.	Yes - included in Register of Compliance Obligations (various).
Local community	Local communities expect the company to operate in a safe and non-polluting manner, be a good neighbour and resolve any issues promptly and sensitively.	Yes - included in Register of Compliance Obligations (e.g. nuisance (odour, noise), air pollution, water quality, etc.).

Insurers	Insurers expect the company to operate in a manner that minimises risk to the environment, to product safety and to plant safety and to deliver any recommendations or demands that are aimed at reducing risk. Specific environmental contamination and product liability insurances are maintained at Group level. A flood risk assessment and action plan was produced to address insurer demands. Insurers are also interested in the continuity of energy supply via the CHP units on site, as these help to maintain production levels which the company is insured against.	Flood risk assessment and action plan included in Register of Compliance Obligations.
Emergency services e.g. Fire Service	Emergency services expect the company to develop and maintain Fire Risk Assessments to provide information on hazardous materials on-site. They also expect to be provided with safe access and facilities to extinguish any fires and prevent harm to humans and the environment, particularly from pollution of water, air or land. The site has a Emergency Response Procedure which covers fire, legionella, flood, etc.	Yes - included in Register of Compliance Obligations.
Suppliers/contractors	Suppliers and contractors expect to be provided with a safe working environment for their activities whilst at Sedamyl UK's site. One supplier has expressed an interest in the carbon emissions linked to the company's choice of transportation.	No.
Industry Trade Associations (Food and Drink Federation, British Starch Industry Association)	The Food and Drink Federation offers a Climate Change Agreement service although the company is exempt due to the efficiency of the CHP plant. The British Starch Industry Association has shown no interest in the company's environmental or energy management activity. As a member of Starch Europe, the British Starch Industry Association is instead having an active role to rappresent the company interests in regards to contaminants limitations.	No.
3rd party certification bodies	3rd party certification bodies expect the company to operate in compliance with their certification standards. FSSC 22000 and EFISC certification bodies expect the company to report any food/feed recall.	Yes - included in Register of Compliance Obligations (ISO 9001, ISO 14001, FSSC 22000 and EFISC).
Sedamyl Group	Sedamyl Group encourages ISO 14001 and ISO 50001 certification. This includes an annual audit and submission of a monthly environmental report, which includes energy performance within its scope. The Sedamyl Group expects the company to be compliant to ISO 9001, FSSC 22000 and EFISC standards in addition to being compliant to local authorities. Furthermore it expects to be part of the decisional process for Capex and projects approval. If finally expects a mutual collaboration in the definition of sales volume regarding main products (alcohol, proteins and starch) through Sedamyl SBE	Yes - ISO 9001, ISO 14001, FSSC 22000 and EFISC certification included in Register of Compliance Obligations.

Environment

Waste

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
1.1	Environmental Protection Act 1990 (Part II) Environment (Amendment etc.) (EU Exit) Regulations SI 2019/458	Environment Agency	Part II of the Act provides the main statutory framework for waste and outlines the basic provisions for the management of waste to prevent or minimise environmental pollution and/or harm to human health. It includes details on the definition of waste, roles and functions of the waste collection/disposal authorities and Environment Agency, duty of care requirements and criminal offences. The requirements relating to environmental permits for waste facilities are dealt with under the Environmental Permitting (England and Wales) Regulations 2016 (SI 2016/1154). 'Waste' is defined as 'any substance or object which the holder discards, or intends or is required to discard'. 'Controlled waste' is defined as 'household, industrial and commercial waste' as defined in the Controlled Waste Regulations 2012 (SI 2012/811). Hazardous waste is defined in the Hazardous Waste (England and Wales) Regulations 2005 (SI 2005/894). Under Section 33, it is an offence to deposit controlled waste (or extractive waste) on land, or knowingly cause or permit the unauthorised deposit of such, unless an Environmental Permit has been issued and the deposit complies with it. Exemptions apply for liquid waste, agricultural waste, battery collection points or waste operations that are subject to a licence under Part 2 of the Food and Environment Protection Act 1985. It is an offence to treat, keep or dispose of controlled waste or extractive waste in a manner likely to cause pollution or harm to health. Section 34 of the Act places a duty of care on anyone who imports, produces, carries, keeps, treats or disposes of controlled waste to ensure that it is transferred only to authorised persons (i.e. those holding a valid Waste Carriers Licence or Environmental Permit) along with a written description (e.g. transfer note or equivalent record) that confirms that the requirements of Part 9 of the Waste (England and Wales) Regulations 2011 (SI 2011/988) have been met (i.e. the Waste Hierarchy has been applied). It also states that controlled waste should also not be allowed to escape.	The Waste Duty of Care Code of Practice, which was revised in November 2018 provides detailed guidance on the duty of care requirements via the following link: https://www.gov.uk/government/publications/waste-duty-of-care-code-of-practice. Use of an electronic system for the storage of transfer notes is also possible using www.edoconline.co.uk. Checks on waste carriers' licences and environmental permits for waste sites can be made via the following links: https://www.gov.uk/find-registered-waste-carrier. https://environment.data.gov.uk/public-register/view/search-waste-operations. The Environment (Amendment etc.) (EU Exit) Regulations make changes to the Act to ensure full continuity on the day of the UK's exit from the EU.	To comply, we must check that all Waste contractors removing waste from our site have a valid waste carrier's licence and are taking our waste to sites with valid environmental permits. We also need to obtain waste transfer notes (or similar records) for each movement of waste from our site (note can be a 'season ticket' for regular repeat collections) and retain these for at least 2 years.	Waste Management Assignee	Waste Carriers Licences Environmental Permits Transfer Notes (or equivalent records)
1.2	Control of Pollution Act 1974 (Chapter 40) Control of Waste (Dealing with Seized Property) (England and Wales) Regulations SI 2015/426	Environment Agency	Much of Part I of this Act was repealed by Part II of the Environmental Protection Act 1990 however some provisions remain in force regarding the: · Licensing of controlled waste disposal; · Collection and disposal of controlled waste; · Waste other than controlled waste; · Reclamation of waste; and · Street cleaning and litter. Chapter 14 of the Control of Pollution (Amendment) Act 1989 made it an offence to transport controlled waste during business or for profit unless registered with the Environment Agency. The Control of Waste		To comply, we need to check that all waste contractors collecting waste from our site have a valid waste carriers' licence and are taking our waste to sites with valid environmental permits. Checks can be made via the following link: https://environment.data.gov.uk/public-register/view/search-waste-carriers-brokers.	Waste Management Assignee	Waste Carriers Licences Environmental Permits Transfer Notes (or equivalent records)

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
			(Dealing with Seized Property) (England and Wales) Regulations 2015 outline the Environment Agency's duties in relation to seized property such as vehicles used illegally to transport waste and related paraphernalia.				
1.3	Controlled Waste Regulations 2012 (SI 2012/811)	Environment Agency	Part II of the Environmental Protection Act 1990 defines three sorts of controlled waste: household, industrial and commercial waste. These Regulations clarify the definition of waste (including litter and refuse) which is to be treated as controlled waste. They also confirm that sewage, and sludge or septic tank sludge which is treated, kept or disposed within a sewage treatment works or is used for agriculture, are not to be treated as controlled waste.		For information only – no action required. Sedamyl's UK waste is classified as industrial waste.	Waste Management Assignee	N/A
1.4	Environmental Permitting (England and Wales) Regulations 2016 (SI 2016/1154) Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations SI 2019/39	Environment Agency Local Authorities	The Environmental Permitting regime builds a more integrated approach to controlling pollution from industrial sources, aiming to achieve a high level of protection of the environment and human health by controlling emissions to air, water and land. These Regulations revoked the former Waste Management Licensing Regulations, meaning that operators of waste sites such as landfill sites, waste incinerators, hazardous waste disposal or recovery sites and non-hazardous waste disposal and recovery facilities must hold an Environmental Permit. Affected installations are listed in Schedule 1 with Chapter 5 allocated specifically to waste management. Two types of permit are available: A standard permit is a simple permit that requires the operator to comply with a standard set of rules for the relevant category of activity. As they are part of a standardised system, standard permits are quicker to apply for and simpler to process. If an activity does not fit within the standard rules due to the nature of the environmental risk or activity, then a bespoke permit is required. This type of permit will have conditions that are specific to the activity carried out by the operator.	Part A(1) activities are regulated by the Environment Agency, whilst Part A(2) and Part B are regulated by Local Authorities. Businesses carrying out waste management activities, including baling, compacting, crushing, shredding, need an Environmental Permit or exemption, unless these occur at the place where the waste was produced. This can be obtained via: waste-exemption. In November 2018, the Environment Agency published a position statement on low risk waste activities that are involved with recycling, recovery or disposal at the site of production, and which do not require an environmental permit. This can be obtained via: Low_risk_waste_activities_that_do_not_need_a_permit.pdf The 2019 Amendment Regulations make amendments to address references to EU Directives that will not legally function once the UK leaves the EU	We are required to ensure that any waste storage, disposal or treatment sites receiving our waste have a valid environmental permit and that any waste treatment activities on site e.g. baling, compacting, crushing, shredding or pulverising waste on-site are conducted in line with any specific requirements within our environmental permit. The requirement for a T4 exemption for compacting and baling does not apply as we are baling waste at the place where it is produced, which is accepted as ancillary treatment prior to collection. Checks on environmental permits for waste sites receiving Sedamyl's UK waste can be made via: https://environment.data.gov.uk/public-register/view/search-waste-operations	Waste Management Assignee	Environmental Permit

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
1.5	Decision 2000/532/EC (OJ:L226/1/2000) establishing a list of wastes (European Waste Catalogue) Waste Classification - Technical Guidance WM3: Guidance on the Assessment and Classification of Waste Commission Notice on Technical Guidance on the Classification of Waste (2018/C124/01)	Environment Agency	The Annex to Decision 2000/532/EC, sets out the list of wastes in accordance with Directive 2008/98/EC, on waste. This list is commonly referred to as the 'European Waste Catalogue' (EWC), which provides a system for the classification and coding of wastes, and determination of those wastes which must be classified as 'hazardous waste'. In the EWC, each waste is uniquely identified by a 6-digit code which needs to be included on waste transfer and consignment notes. Those marked with an asterisk are considered to be hazardous for the purpose of the Hazardous Waste (England and Wales) Regulations 2005 (SI 2005/894). The full List of Wastes is available in Table 2 of Annex 1 to the Commission Notice on Technical Guidance on the Classification of Waste). WM3 can be consulted in cases of any doubt as to the correct classification. The UK Government published a Technical Guidance Note (WM3: Waste Classification) to help with the assessment and determination of hazardous waste. The Guidance describes how to assess if a waste has a hazardous property and how to classify it. In 2018, the European Commission published technical guidance on the classification of waste, which helps with the appropriate classification of waste as hazardous or non-hazardous, and understanding when and under what circumstances waste is to be considered hazardous.		We are required to ensure that the correct 6-digit code is used to describe our waste upon transfer to a licensed waste carrier – the code needs to be included on the transfer notes or consignment notes for each waste movement from site so should be checked prior to signing the waste off site. Hazardous wastes should be identified using the List of Wastes/European Waste Catalogue (see Annex 1 to the Commission Notice on Technical Guidance on the Classification of Waste). WM3 can be consulted in cases of any doubt as to the correct classification.	Waste Management Assignee	Transfer notes Consignment notes
1.6	Hazardous Waste (England and Wales) Regulations 2005 (SI 2005/894) Hazardous Waste (Miscellaneous Amendments) Regulations SI 2015/1360 Hazardous Waste (England and Wales) (Amendment) Regulations SI 2016/336	Environment Agency	Relates to Hazardous Waste as defined in the European Waste Catalogue (see 1.5 above). Hazardous Wastes are defined as having one of the following 15 properties: H1 Explosive; H2 Oxidising, H3 Flammable; H4 Irritant; H5 Harmful; H6 Toxic; H7 Carcinogenic; H8 Corrosive; H9 Infectious; H10 Toxic for reproduction; H11 Mutagenic; H12 Waste which releases toxic gases in contact with water, air or an acid; H13 Sensitising; H14 Dangerous for the environment; H15 Waste capable by any means, after disposal, of yielding another substance, e.g. a leachate which possesses any of the characteristics above. Hazardous Wastes include oils and oil containers, solvents, certain batteries, asbestos, fluorescent tubes/lamps, waste electrical/electronic equipment and contaminated land. Key requirements are: 1) Producers must avoid mixing Hazardous and non-Hazardous Wastes. 2) On removal of Hazardous Wastes from premises, all producers must complete a 'consignment note' to accompany the waste and retain it for at least 3 years. The relevant 6-digit code from the European Waste Catalogue must be included on the consignment note. Note that the www.edoconline.co.uk electronic system does not apply to consignment notes. The Hazardous Waste (Miscellaneous Amendments) Regulations 2015 amended various items of legislation concerning hazardous waste or cross-referring to other legislation concerning hazardous waste. They also revoke two pieces of outdated legislation on the list of wastes, essentially replacing previous national legislation on classifying wastes with the European Waste Catalogue. The 2016 amendment removed the requirement to register any premises that produces more than 500kg of hazardous waste per annum with the Environment Agency.		We are required to segregate any Hazardous Wastes and dispose of them separately in exchange for a consignment note which we must retain for at least 3 years. The consignment note must contain the correct 6-digit code from the European Waste Catalogue.	Waste Management Assignee	Consignment notes
1.7	Finance Act 1996 (Chapter 8, Part III) The Landfill Tax Regulations 1996 (SI 1996/1527) The Landfill Tax (Amendment)	HMRC	Chapter 8 of the Finance Act 1996 established a landfill tax which is levied on all waste disposed of to landfill. Landfill operators are responsible for paying the tax and typically pass this cost on to their customers via relevant waste invoices. For 2019/20, the landfill tax for active waste is £91.35 per tonne and £2.90 per tonne for inert waste. The rates apply from April 2019. The Landfill Tax (Amendment) Regulations 2017 amended the Landfill Tax Regulations 1996 by increasing the maximum amount of credit which a registered person (i.e. landfill operator) may claim against its landfill tax		We automatically pay landfill tax through waste invoices in cases where our waste is sent to landfill.	Waste Management Assignee	Waste invoices

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
	Regulations 2017 (SI 2017/332) Landfill Tax (Qualifying Material) Order SI 2011/1017 Finance Act 2019 Chapter 1		liability in respect of contributions to environmental bodies operating under the Landfill Communities Fund in any contribution year. The Landfill Tax (Qualifying Material) Order specifies those types of waste which are defined as inert wastes for the purposes of the landfill tax including subsoil, glass, concrete and bricks. The Landfill Tax Regulations 1996 lay out various requirements relating to the administration of the landfill tax.				
1.8	Producer Responsibility Obligations (Packaging Waste) Regulations SI 2007/871 Producer Responsibility Obligations (Packaging Waste) (Amendment) Regulations SI 2017/1221	Environment Agency	These Regulations set out the requirements for the recovery and recycling of waste packaging to enable the UK to meet its European packaging recovery and recycling targets. The Regulations apply to organisations which place more than 50 tonnes of packaging material per annum into the packaging supply chain and have an annual turnover greater than £2m (Note: for a group of companies, these requirements apply to the total amount of packaging handled by the group and the group's total annual turnover). The obligations apply to manufacturers, convertors, packers/fillers, importers, sellers and service providers. An overall UK recovery target (81% in 2019) is established along with recycling targets for aluminium (61% in 2019), glass (79% in 2019), steel (82% in 2019), plastic (55% in 2019), wood (43% in 2019) and paper/card (73% in 2019). Obligated organisations must: • Register with the Environment Agency, either directly or through a compliance scheme; • Ensure sufficient recovery and recycling of certain levels of packaging waste (or join a compliance scheme which does this on behalf of the organisation); and • Provide evidence to the Environment Agency using electronic packaging recovery notes (ePRNs) and/or packaging export recovery notes (ePERNs). ePRNs are issued electronically by accredited re-processors who accept packaging waste and issue a note stating how much packaging waste they have recovered or recycled. ePERNs are issued electronically by accredited exporters when packaging waste is exported to approved re-processors outside of the UK. There are three main ways of complying: 1) Join a packaging compliance scheme: Many businesses join a packaging compliance scheme (PCS) which will take on the businesses' recovery and recycling obligations in exchange for payment of a fee. 2) Individual route: Individual businesses can calculate their own recycling and recovery requirements and register directly with the Environment Agency. 3) Allocation method: If the business has a turnover between £2 million and £5 million, the obligations can be based on turnover alone. Records must be kept for at least 4 years whichever method is used. Note that the rules can apply to businesses not in the packaging industry which meet turnover or handling thresholds and carry out any of the following: 1) Pass on incoming packaging to others who will use the product contained in the packaging; 2) Pass on packaging to someone who will pass it on to others; or 3) Import packaging or packaged goods. The 2017 amendment changed the packaging targets for the packaging waste recycling targets for glass, plastic, aluminium, steel, paper and wood for 2018 to 2020.		As Sedamyl UK now exceeds the 50 tonnes and £2m turnover thresholds, we need to join a compliance scheme and submit annual returns to verify compliance.	Environmental Manager	Electronic Packaging Recovery Notes (ePRNs) Electronic Packaging Export Recovery Notes (ePERNs)
1.9	Packaging (Essential Requirements) Regulations SI 2015/1640	Local Authority – Weights and	These Regulations set out the essential requirements that packaging must meet before it can be placed on the market as follows: Manufacturing and composition of packaging:		Applies to any packaging used for shipping product to customers. Packaging suppliers should be able to confirm compliance with the	Purchasing department	Supplier communications

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
		Measures Authority National Measurement Office	• Packaging volume and weight must be the minimum necessary to maintain safety, hygiene and acceptance for the packed product and consumer. • Packaging must be designed and produced to permit reuse or recovery, including recycling, and to minimise environmental impact when packaging waste or residues are disposed of. • Packaging must have minimum content of noxious and other hazardous substances to reduce their presence in emissions, ash or leachate upon incineration or landfill. Reusable packaging: • The physical properties and characteristics of the packaging must enable a number of trips or rotations in predictable conditions of use. • It must be possible to process the used packaging in order to meet health and safety requirements for the workforce. • The requirements specific to recoverable packaging must be fulfilled when the packaging is no longer reused and becomes waste. Recoverable nature of packaging: • Packaging must enable the recycling of a certain percentage by weight of the materials used into the manufacture of marketable products, in compliance with current EU standards. • Packaging waste processed for energy recovery must have a minimum inferior calorific value. • Packaging waste processed for composting must be sufficiently biodegradable so that it does not hinder separate collection and composting. • Biodegradable packaging waste must be capable of undergoing decomposition such that most of the finished compost becomes carbon dioxide, biomass and water. Technical documentation showing compliance with the Regulations must be kept for at least 4 years from when the packaging was placed on the market.		requirements as they are required to keep records for 4-years. Sedamyl UK should look to design its own packaging to be the minimum volume/weight for the intended packaged item, to be reusable, recyclable and made from recycled content wherever possible. Single use plastics should be avoided wherever possible.		
1.10	Waste Electrical and Electronic Equipment Regulations SI 2013/3113 Waste Electrical and Electronic Equipment (Amendment) Regulations SI 2018/102 Waste Electrical and Electronic Equipment (Amendment) (No.2) Regulations 2018 SI 2018/1214	Environment Agency	The Regulations aim to combat the rapid growth and increasing environmental impact of Waste Electrical and Electronic Equipment (WEEE), by increasing treatment, reuse, recovery and recycling. Producers of Electrical and Electronic Equipment (EEE) are made responsible for financing the collection, treatment, and recovery of WEEE by joining a compliance scheme, and by obliging distributors to allow consumers to return their WEEE free of charge. Distributors can also join a distributor take back scheme to provide this service on their behalf. WEEE that is recovered must be taken to an Authorised Treatment Facility or Exporter. Under a compliance scheme, systems must be established for the treatment and recovery of WEEE with various targets set for the levels of WEEE treated during a compliance period. Producers are also required to mark all EEE they market with a crossed-out wheelie bin symbol, along with a producer identification and date mark. The Regulations apply to EEE which falls within 10 product categories listed in Schedule 1 as follows: 1) Large household appliances; 2) Small household appliances; 3) IT and telecommunications equipment; 4) Consumer equipment and photovoltaic panels; 5) Lighting equipment; 6) Electrical and electronic tools (with the exception of large scale stationary industrial tools); 7) Toys, leisure and sports equipment; 8) Medical devices (with the exception of all implanted and infected products); 9) Monitoring and control instruments; and 10) Automatic dispensers. Schedule 2 provides examples. From 1st January 2019, the list of product categories will be extended to include photovoltaic panels, fluorescent lamps containing mercury and equipment containing ozone-depleting substances. The Regulations apply to EEE producers, retailers and distributors, local authorities, the waste management industry, exporters and re-processors, businesses and other non-household EEE users.		We are required to segregate WEEE and return it to suppliers or via waste collection schemes.	Waste Management Assignee	WEEE disposal records – consignment notes / evidence notes

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
			The 2018 amendment clarified the rights of local authorities in relation to the collection, treatment, recovery and disposal of WEEE deposited at designated collection facilities; and inserted a new reporting requirement relating to the amount of WEEE sent for treatment or reuse outside the UK. The second 2018 amendment (No.2): o Implements the open scope principle to bring all electrical and electronic equipment (EEE) into the scope of EU Directive 2012/19/EU unless exempt or excluded and retain the current UK WEEE system product categories; o Makes membership by all producer compliance schemes (PCSs) of the PCS Balancing System (PBS) mandatory; o Ensures that where a charging scheme of an appropriate authority (i.e. Environment Agency) supersedes the annual producer charge set out in the Waste Electrical and Electronic Equipment Regulations SI 2013/3113, the charge payable by each scheme member will go to the Environment Agency; and o Provides that reports submitted by approved authorised treatment facilities must be submitted online in the format set out by the Environment Agency.				
1.11	End-of-Life Vehicle Regulations SI 2003/2635 End-of-Life Vehicles (Producer Responsibility) Regulations SI 2005/263	Environment Agency	These Regulations aim to reduce waste levels from vehicles (cars and vans) when they are finally scrapped. They include tightened environmental standards for vehicle treatment sites, requiring that last owners must be able to dispose of their vehicles free of charge (producers must pay all or a significant part of the free take-back), setting increasing reuse, recycling and recovery targets and restricting the use of hazardous substances in new vehicles and replacement parts. The 2003 Regulations included improved standards for vehicle treatment sites and technical standards for new vehicles, including the prohibition of lead, mercury, cadmium or hexavalent chromium. They also require vehicle producers to use European Coding Standards to identify the materials and components that are suitable for reuse, recycling and recovery, and to provide dismantling information for new vehicles that are marketed as well as literature on the design of their vehicles and components. When a vehicle is sent for dismantling or disposal, the owner must check that the site to which they are sending it has an Environmental Permit and is listed as an 'Authorised Treatment Facility' (ATF). If ELVs are sent to a site for storage prior to being taken to an ATF for depollution, the storage site must hold an Environmental Permit. When a vehicle owner passes on a vehicle for dismantling or disposal, they must be issued with a 'Certificate of Destruction'. Without such a certificate the DVLA will not be able to deregister the vehicle. A Certificate of Destruction must contain detailed information describing the vehicle, details of the ATF and details of the competent issuing authority. The 2005 Regulations set out the requirements for vehicle producers to register with the Secretary of State and provide networks of facilities where last owners of their brands of vehicles can take them for collection and treatment at the end of their lives. These facilities must provide this free of charge.		Applies to any company cars that are scrapped – a Certificate of Destruction must be obtained from showing correct disposal at an Authorised Treatment Facility. All company cars are leased. Does apply to JCB, telehandler, etc.	???	Certificate of Destruction Environmental Permit for ATF
1.12	Waste Batteries and Accumulators Regulations SI 2009/890	Environment Agency	These Regulations establish a Producer Responsibility system for the collection, treatment and recycling of waste portable, industrial and automotive batteries. They complement the Batteries (Placing on the Market) Regulations 2008 by specifically implementing the waste provisions of the 2006 EU Batteries Directive, which seeks to improve the environmental performance of batteries and accumulators and the activities of those involved in their life cycle (e.g. producers, distributors, end users and particularly those directly involved in their treatment and recycling). The Regulations introduce requirements for the treatment and recycling of all waste batteries. Furthermore, any person placing batteries on the market must register as a producer of batteries, and report on waste batteries collected and sent for recycling. Specific requirements are set out for portable batteries as follows: • The EU Batteries Directive target was for 45% of batteries sold to be recycled from September 2016. • Producers can meet their responsibilities for collection and recycling by joining a Battery Compliance Scheme (BCS). BCSs also carry out publicity aimed at consumers informing them how to return their waste household batteries for recycling.		Requires us to segregate waste batteries and return to suppliers who usually provide battery take back schemes (e.g. battery bins). Waste battery bins are provided on site for initial segregation.	Waste Management Assignee	Records of battery waste recycling – consignment notes unless returned directly to suppliers.

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
			• Producers who put less than 1 tonne of portable batteries on the market must register with the appropriate authority but do not have to fund collection, treatment and recycling. • Certain retailers of household batteries must collect in-store such batteries when they become waste. For industrial and automotive batteries, the following requirements are set out: • Waste industrial and automotive batteries cannot be disposed of by landfill or incineration. • Producers of industrial and automotive batteries must arrange for their separate collection and recycling when they become waste.				
1.13	Waste (England and Wales) Regulations (SI 2011/988)	Environment Agency	These Regulations replaced previous regulations on the registration of waste carriers, transfer of waste and waste strategy. They also introduced new provisions which put greater emphasis on the life-cycle of waste. They established a requirement for each appropriate authority (Secretary of State) to put a waste prevention programme in place with objectives and monitoring. They also require waste management plans to be developed to outline policies for the management of waste, including the prevention of landfill for biodegradable waste. England's current waste management plan is the 'Our Waste, Our Resources: A Strategy for England' which was published in December 2018 and which focuses on the circular economy model. The Strategy confirms that plastic waste is being targeted for reduction and improved recyclability, and is consulting on a tax for plastic packaging with less than 30% recycled content. All organisations importing, producing, collecting, transporting, recovering or disposing of waste (including waste carriers, dealers and brokers) must apply the Waste Hierarchy where technically, financially and environmentally feasible. Waste collection authorities who collect waste paper, metal, plastic or glass, must do so by way of separate collection. The Regulations introduced a two-tier system for waste carrier and broker registration and excluded some categories of waste from controls. Carriers, brokers and dealers of controlled waste must register with the Environment Agency, either as a lower tier or upper tier carrier. Lower tier carriers include those wishing to carry their own wastes. Provisions also specify what should be included in a transfer note (waste description, 6-digit EWC Code, quantity, SIC code of transferor, time and place of transfer, name and address of both transferor and transferee, waste carrier registration details, environmental permit details, etc.) and how long it should be kept (2 years). The transfer note should provide written confirmation that the Waste Hierarchy has been applied prior to transfer and waste segregation should be clearly evident. The Edoc system can be used as an alternative means of generating electronic waste transfer notes http://edoconline.co.uk/. The Regulations made minor amendments to the Hazardous Waste Regulations 2005 and Environmental Permitting Regulations 2016.		We must obtain waste transfer notes and hazardous waste consignment notes for each movement of waste from site, and retain these for 2 and 3 years respectively. We must also ensure the correct 6-digit code from the European Waste Catalogue is used to describe our waste and that only licensed waste carriers are transporting our waste to disposal, storage or treatment sites with valid environmental permits. Application of the 'Waste Hierarchy' (i.e. Reduce, Reuse, Recycle, Dispose) is a key requirement, so we need to demonstrate this is happening in practice. Also need to support the transition towards the circular economy by purchasing goods with recycled content (minimum 30% for plastic packaging) that are also recyclable at the end of their life.	Waste Management Assignee	Waste Transfer Notes Waste Consignment Notes Waste Carriers Licences
1.14	Scrap Metal Dealers Act 2013	Local Authorities	The Act introduced a revised regulatory regime for the scrap metal recycling and vehicle dismantling industries. It provides local authorities with more powers to allow them to better regulate these industries. Anyone who is a scrap metal dealer must hold a licence issued by their local authority and must keep certain records. Licences must be either a site licence or a collector's licence. The Environment Agency maintains a register of scrap metal licences issued by local authorities. Scrap metal dealers with a site licence must display a copy of the licence at each site identified in the licence, in a prominent place that is accessible to the public. Scrap metal collectors must display a copy of their collector's licence in any vehicle used for their business, so it can be read by someone outside the vehicle. Dealers must not receive scrap metal from anyone without verifying the person's full name and address and must not pay for scrap metal with cash. Payment can only be via a cheque which is not transferable; or electronic transfer of funds.		Requires us to dispose of scrap metal via licensed scrap metal collectors or licensed scrap metal sites, to pay by cheque or electronic transfer of funds, and keep records of scrap metal transactions.	Waste Management Assignee	Records of scrap metal transfers. Copies of scrap metal dealers site licence or collector's licence.
1.15	Littering From Vehicles Outside London (Keepers: Civil Penalties) Regulations SI 2018/171	Local Authority	These Regulations gave local authorities in England powers to require the keeper of a vehicle to pay a fixed (civil) penalty if there is reason to believe that a littering offence has been committed from the vehicle.		Must ensure that no littering occurs from vehicles used for company business.	All	N/A

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
1.16	Waste Enforcement (England and Wales) Regulations SI 2018/369	Environment Agency	These Regulations make amendments to the Environmental Protection Act 1990; and Environment Act 1995 in order to enhance powers to tackle illegal activity at waste sites, by providing waste regulation and waste collection authorities in England and Wales the power to require waste to be removed from a site where it has been unlawfully kept or disposed of, including waste that was initially disposed of lawfully. They also give the Environment Agency the power, by notice or by application to court for an order, to restrict access and the importation of waste to premises.		Reinforces the need to avoid any stockpiling of waste at the Company's premises.	All	N/A
1.17	Waste (Miscellaneous Amendments) (EU Exit) Regulations SI 2019/620	Various	These Regulations come fully into force on exit day as defined in the European Union (Withdrawal) Act 2018. They make amendments to waste-related Acts and various pieces of retained direct EU legislation in the area of waste in order to ensure they operate effectively once the UK leaves the EU.			All	N/A

Air and Energy

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
2.1	Environmental Protection Act 1990 (Part I)	Environment Agency Local Authority	The Act provides a framework, which enabled the Secretary of State to enforce regulations to prevent air polluting caused by emissions from various industrial processes. Crucially, it introduced the concept of integrated pollution control. Under Part 1, the Act outlines the controls on certain industrial processes and requires that they are authorised under either an Integrated Pollution Control (IPC) or Local Authority Atmospheric Pollution Control (LAAPC) regime, according to their potential environmental impact. This Part of the Act is now largely implemented through the Environmental Permitting Regulations 2016 (SI 2016/1154) (former IPPC regime).		We have an environmental permit from the Environment Agency - see 2.2 below.	Environmental Manager	Environmental Permit
2.2	Environmental Permitting (England and Wales) Regulations 2016 SI 2016/1154 Environmental Permitting (England and Wales) (Amendment) Regulations 2018 Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations SI 2019/39	Environment Agency Local Authority	The Environmental Permitting regime builds a more integrated approach to controlling pollution from industrial sources, aiming to achieve a high level of protection of the environment and human health by preventing or reducing emissions to air, water and land. Operators of certain installations – listed under Schedule 1 of the Regulations – must obtain an Environmental Permit to operate or register an exempt operation. Part A(1) activities are regulated by the Environment Agency, whilst Part A(2) and Part B are regulated by Local Authorities. Permits will typically have conditions relating to point source and fugitive emissions, which must be complied with. This environmental permitting system covers the regimes previously established for pollution prevention and control, waste incineration and the operation of large combustion plants, and also implements the Solvent Emissions Directive. Under the EU Industrial Emissions Directive (IED), solvent emission activities are classed as the manufacture of coating preparations, varnishes, inks and adhesives which consume 100 tonnes or more of solvent in any 12-month period. All environmental permit applications must be made by the operator of a regulated facility to the regulator, who decides whether to grant authorisation. A single site permit can be issued which authorises multiple sites under one permit. If the regulator feels that an operator has contravened or is likely to contravene an environmental permit condition, they can serve an enforcement notice. If the contravention involves a serious		We have an Environmental Permit issued by the Environment Agency under Chapter 1 (Energy Activities) Section 1.1 (Combustion Activities) as a 'medium combustion plant'. This requires us to comply at all times with the conditions of the Permit and means that we have regular inspections of our site from a nominated Environment Agency Inspector.	Environmental Manager	Environmental Permit Monitoring Records

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
			pollution risk, a suspension notice can be served. These notices will not be withdrawn until certain requirements have been met to remedy the situation. If the regulator feels that the operation of a regulated facility under an environmental permit involves a serious pollution risk, they can arrange for steps to be taken to prevent or remedy that risk and recover the costs from the operator. The Environmental Permitting (England and Wales) (Amendment) Regulations 2018 transposed the European Union's Medium Combustion Plant Directive into UK legislation via the environmental permitting regime. Medium Combustion Plants are defined as those installation with a combined rated thermal input of between 1MW and 50MW. The Medium Combustion Plants Directive aims to limit the emissions of certain pollutants into the air from medium combustion plants, by setting out rules to control emissions of sulphur dioxide, nitrogen oxides and dust into the air from such plants, reducing the risk to human health and the environment. The Industrial Emissions Directive was introduced to the environmental permitting regime via a 2013 amendment. This introduced controls on Large Combustion Plants, which are those with a combined rated thermal input above 50MW. The 2019 Amendment Regulations address references to EU Directives that will not legally function once the UK leaves the EU.				
2.3	Environment Act 1995 (Part IV)	Environment Agency Local Authority	Part IV of the Act deals with air quality and requires the Secretary of State to publish a National Air Quality Strategy with air quality standards, objectives for limit levels and guidance on how local authorities are to achieve the standards. The Act gives local authorities powers to designate local air quality management areas (LAQMA) in cases where a review shows that the national air quality standards or objectives are not being met. Within these areas Action Plans to improve local air quality will be formulated. Local authorities are given powers to impose spot checks and fine vehicle operators who are not complying with emission standards. The UK Government published a new clean air strategy in January 2019, which confirms that emissions from small to medium sized industrial sites will be addressed. The strategy is available via: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/770715/clean-air-strategy-2019.pdf	The draft Selby District Council Air Quality Action Plan defines the full range of measures being set to improve air quality which can be found via: https://www.selby.gov.uk/air-quality-management-area.	Our site does not fall within a Local Air Quality Management Area, but Selby District Council established its first LAQMA in February 2016. The LAQMA is located more than 1km to the northwest of the site on New Street and has been set due to exceedances of mean annual nitrogen dioxide concentrations. Heavy goods vehicles should be instructed to avoid this area to help improve air quality in this area	Environmental Manager	N/A
2.4	Clean Air Act 1993 (Chapter 11)	Environment Agency Local Authority	The Clean Air Act 1993 provides a comprehensive control mechanism for the protection of the environment from smoke, dust and fumes. Emissions of dark smoke from any chimneys and industrial or trade premises must be prevented, unless they occur within permitted periods as specified in the Dark Smoke (Permitted Periods) Regulations 1958 (SI 1958/498). The smoke is assessed using the Ringelmann Chart. The Secretary of State can set emission limits for grit, dust and fumes from chimneys, furnaces and boilers with such limits based on the various heat inputs and outputs of the installation in question. Local authorities can declare an area to be a smoke control area, thereby prohibiting the emission of smoke in that area, unless an authorised fuel or exempt fireplace is used. To limit or reduce air pollution, specific regulations have been produced under this Act regarding motor fuel, and the sulphur content of oil fuel		These Regulations apply to emissions from our boiler house with the main requirements on chimney height dealt with by the Local Authority Environmental Health Department and our Environmental Permit. Frequent servicing of our boilers serves to ensure that emissions are acceptable.	Environmental Manager	Boiler servicing records Air quality sample monitoring records
2.5	Smoke Control Areas (Authorised Fuels) (England) (No. 2) Regulations SI 2014/2366	Local Authority	These Regulations are made in accord with Part 3 of the Clean Air Act 1993 and list the fuels that are authorised for use in smoke control areas. The main purpose of smoke control areas is to reduce pollution from domestic chimneys by prohibiting the burning of fuels such as coal and wood on open fires. Only authorised fuels are permitted to be burned within a smoke control area unless an exempted appliance is used. Authorised fuels include solid smokeless fuels, gas and oil.	Selby 2 Smoke Control Order 1982 – see Selby-No.2-smoke-control-area-1982.pdf	The site does fall within a Smoke Control Area, which means that only authorised fuels can be burned within a working fireplace unless the fireplace has been exempted. This would be dealt with under the Environmental	Environmental Manager	N/A

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
					Permit. The full set of Smoke Control Areas is available via: https://www.selby.gov.uk/smoke-control.		
2.6	Smoke Control Areas (Exempted Fireplaces) (England) Order 2015 (SI 2015/307)	Local Authority	The fireplaces listed in the Schedule to this Order are exempt from the prohibition on producing smoke emissions in smoke control areas, contained in Part 3 of the Clean Air Act 1993, subject to conditions. Part 3 of the Clean Air Act 1993 prohibits the emission of smoke from chimneys in smoke control areas, unless authorised fuels are used. However, the Secretary of State may, by Order, exempt specified classes of fireplace from the prohibition of emitting smoke in smoke control areas. For the purposes of Part 3 of the Clean Air Act 1993, the following are authorised fuels: anthracite; semi-anthracite; electricity; gas; low volatile steam coals; and the fuels listed in the Full Text of the Schedule to these Regulations.		As above (2.5).	Environmental Manager	N/A
2.7	The Finance Act 2000, Schedule 6 and 7 (The Climate Change Levy) Finance Act 2019 Chapter 1 Climate Change Levy (General) Regulations 2001 SI 2001/838) Climate Change Levy (Fuel Use and Recycling Processes) Regulations 2005 (SI 2005/1715) Climate Change Levy (Registration and (Miscellaneous Provisions) Regulations 2001 (SI 2001/7)	HMRC	All UK non-domestic and non-charity users of non-renewable energy are subject to the Climate Change Levy (CCL), which was introduced in Part 2 of the Finance Act 2000. The rate of CCL that is payable depends on the type of fuel used. Chapter 1 of the Finance Act 2019 set out increased rates from 1st April 2019 as follows: • Electricity: 0.847 pence per kWh •Gas: 0.339 pence per kWh. • Liquid petroleum gases: 2.175 pence per kg. • Any other taxable commodity (e.g. coal): 2.653 pence per kg. Supplies for non-fuel use and supplies for fuel use in a prescribed recycling process are exempted from the CCL and are listed in the Climate Change Levy (Fuel Use and Recycling Processes) Regulations 2005. The Climate Change Levy (Registration and Miscellaneous Provisions) Regulations 2001 (SI 2001/7) make provisions regarding registration for the CCL for individuals, groups, partnerships and other special cases.		We automatically pay the Climate Change Levy through our gas bills. The increasing cost of the CCL will serve to further incentivise energy efficiency improvements	Environmental Manager	Energy invoices
2.8	The Road Vehicles (Construction & Use) Regulations 1986 (SI 1986/1078)	Local Authority	These Regulations make it an offence to use a vehicle if it is emitting any smoke, visible vapours, grit, sparks, ashes, cinders or oily substances. Introduced standards are enforced through the annual MOT certificate. The Regulations regularly tighten in-service emission requirements for all vehicles in line with EU Directives. Emissions limits can be found within the Regulations.		Company cars over 3 years old require an annual MOT test to confirm acceptable emission levels. All company cars are leased, so this requirement falls on the lease company.	???	Company car MOT certificates (lease company)
2.9	Road Traffic (Vehicle Emissions) (Fixed Penalty) (England) Regulations SI 2002/1808	Local Authority	These Regulations enable local authorities to stop vehicles and check emission levels when entering an air quality management area and to issue fixed penalty notices to drivers causing emissions offences. They also allow authorised persons to ask drivers to turn off their engine or issue a fixed penalty notice to drivers who are seen to be idling their engine when stationary.		Any company cars over 3 years old require an annual MOT to confirm they are within acceptable emission levels. All company cars are leased, so this requirement falls on the lease	???	Company car MOT certificates (lease company) Vehicle service records

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
					company. Drivers must not leave engines idling whilst vehicles are stationary to reduce emissions and avoid fines.		
2.10	Sulphur Content of Liquid Fuels (England and Wales) Regulations 2007 (SI 2007/79) Sulphur Content of Liquid Fuels (England and Wales) (Amendment) Regulations SI 2014/1975	Local Authority	These Regulations prohibit the use of various liquid fuels which exceed a certain sulphur content: i.e. heavy fuel oil that has a sulphur content exceeding 1% by mass, and gas oil with a sulphur content exceeding 0.1%.		Applicable to oil used in back-up generators, although would be addressed via environmental permit	???	Purchasing Records
2.11	EU Regulation No. 1005/2009 on Substances that Deplete the Ozone Layer Ozone Depleting Substances Regulations 2015 (SI 2015/168) Ozone-Depleting Substances and Fluorinated Greenhouse Gases (Amendment etc.) (EU Exit) Regulations SI 2019/583	Environment Agency	The EU Regulations implemented the Montreal Protocol and apply directly in the UK. The 2015 Ozone Depleting Substances Regulations provide for the execution and enforcement of the EU Regulations and set minimum qualifications (Schedule 2) and penalties (Part 3) for breaches of the EU Regulations. The EU Regulations introduced restrictions on the supply and use of Ozone Depleting Substances (ODS) which are found in refrigeration, air-conditioning and heat pump applications, and fire protection systems. They established rules for the production, import, export, marketing, use, recovery, recycling, reclamation and destruction of ODS, as well as reporting of information, and equipment containing or relying on them. They apply to controlled substances (i.e. ODSs listed in Annex 1 of the EU Regulations), new substances and to products and equipment containing or relying on controlled substances. They encourage the recovery, reclamation and destruction of controlled substances by users, refrigeration technicians and others. The production of controlled substances is banned, as is placing on the market in non-refillable containers (except for laboratory and analytical uses). Fire protection systems and equipment containing halons are banned and must be decommissioned. The supply and use of CFCs and HCFCs are progressively banned, including in aerosols, solvents, refrigerants and foam. All ODS must be recovered during servicing and maintenance of refrigeration and air-conditioning equipment and before dismantling or disposing of equipment. Destruction of ODS must be carried out at a licensed treatment facility. All companies providing maintenance or servicing of refrigeration and air conditioning equipment must comply with these Regulations. A person is competent to carry out relevant work whilst performing a task specified in Schedule 2 to the 2015 Regulations if holding any of the qualifications specified in the Table. A person is competent to carry out other relevant work if they have obtained an in-house qualification in respect of that other relevant work. The 2019 Amendment Regulations will come into force on exit day as defined in the European Union (Withdrawal) Act 2018 and make amendments to legislation relating to ODS and F-gases. The use of ODS and F-gases are restricted by: Regulation (EC) 1005/2009, on substances that deplete the ozone layer; and Regulation (EU) 517/2014, on fluorinated greenhouse gases. Those Regulations operate at EU level and whilst they will be retained in UK law on exit day, there would be operational deficiencies if the Regulations were left unchanged.		Need to ensure that air conditioning, chillers and refrigeration systems are serviced by appropriately qualified personnel with records kept, with no topping up using ODS as refrigerant gases.	Maintenance Manager	Air conditioning service records and certificates to show competence of contractors (e.g. City and Guilds/CITB).

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
2.12	The Fluorinated Greenhouse Gases Regulations 2015 (SI 2015/310) EU Regulation 517/2014 on fluorinated greenhouse gases Fluorinated Greenhouse Gases (Amendment) Regulations SI 2018/98		These Regulations (known collectively as the F-Gas Regulations) impact mainly on the commercial refrigeration, air-conditioning and heat pump, and fire protection sectors, and on the personnel involved in the installation, servicing and recovery of F-gases from these systems as well as from equipment containing fluorinated greenhouse gas-based solvents, high voltage switchgear and fire extinguishers. Operators of relevant systems have a range of obligations including prompt leakage repair, leakage checking and record keeping and ensuring appropriately certified companies and qualified personnel are used. The Regulations also require the mandatory labelling and disposal of products and equipment containing F-gases, the reporting of information, and the training and certification of personnel involved in particular activities, specifically in relation to the containment and recovery obligations. Since 1st January 2017, installed equipment must be labelled with the following information: • Explicit notice that the labelled unit contains fluorinated greenhouse gas. • The type of refrigerant used, and its quantity in kilograms. • The GWP (Global Warming Potential) of the refrigerant in CO2 equivalent (CO2e). • A reference that gases are contained in hermetically sealed equipment, if applicable. Penalties for non-compliance and training requirements for all personnel handling equipment containing F-gases are stipulated. It is an offence to work with F-gases without holding a recognised City and Guilds statutory refrigeration, air conditioning and heat pump equipment qualification. The City and Guilds Level 2079-11 qualifications are suitable for work with equipment containing >5 tonnes of CO2e F-gases. For WEEE containing <5 tonnes of CO2e F-gases and <3k of F-gases, the employing company must have a Company Certificate and have provided suitable training. Furthermore, any company that installs, maintains or services equipment containing F gases must hold a Company Certificate issued by a Company Certification Body (e.g. Refcom). Leaks and emissions of controlled substances must be prevented through appropriate measures with mandatory documented leak checks required as specified below. These are based on the GWP multiplied by the volume in each system to give a CO2e value. If the system contains between: • 5 and 50 tonnes CO2e it requires one inspection per year; • 50 to 500 tonnes CO2e requires inspection every six months; or • If >500 tonnes CO2e requires quarterly inspections. The leak checking frequency can be halved if permanent leak detection systems are fitted. Permanent leak detection systems are mandatory for system charges above 500 tonnes CO2e. For hermetically sealed systems containing F-gases at less than 10 tonnes of CO2e, leak detection is not required if the labelling states that the equipment is hermetically sealed. Any leaks must be repaired within 14 days, checked via pressure testing and then re-checked for efficacy within 1 month. Records must be kept on the quantity and type of controlled substances added and quantities recovered during maintenance, servicing and disposal. Other records should also be kept, including details of the company or technician which performed the maintenance or servicing, as well as the dates and results of leak checks. The 2018 Regulations amended the 2015 Regulations to provide for the enforcement of the following EU Regulations which were introduced to support Regulation (EU) 517/2014 on F-gases: o Regulation (EU) 2015/2065, establishing the format for notification of the training and certification programmes of Member States; o Regulation (EU) 2015/2066, on requirements and conditions for certification of those carrying out installation, servicing, maintenance, repair or decommissioning of electrical switchgear containing F-gases or recovery of F-gases from stationary electrical switchgear; o Regulation (EU) 2015/2067, on certification of people and companies regards stationary refrigeration, air conditioning and heat pump equipment, and refrigeration units of refrigerated trucks and trailers, containing F-gases; o Regulation (EU) 2015/2068, establishing the format of labels for products and equipment containing F-gases;		The requirements rely on the contractors performing servicing and repair of air conditioning systems. Any equipment containing F-gases must be regularly maintained and checked for leaks, with prompt response arranged for leaks (within 14 days). Checks on repairs in the form of pressure tests must then be conducted to ensure efficacy as well as follow up checks within 30 days. Part 3 of the 2015 Regulations specifies the levels of training required for certain tasks (e.g. servicing/maintenance, dismantling & decommissioning). All equipment installed which contains F-gases must be labelled to confirm such including the type of refrigerant, its quantity in kg and its GWP in CO2e.	Maintenance Manager	Air conditioning servicing records (F-gas logs) Certificates to show competence of contractors (e.g. City and Guilds/CITB for individuals and Company Certificate for companies) Equipment labelling

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
			o Regulation (EU) 2016/879, establishing detailed arrangements relating to the declaration of conformity when placing refrigeration, air conditioning and heat pump equipment charged with hydrofluorocarbons on the market and its verification. The 2018 Amendment Regulations also served to: o Introduce civil penalties for infringements of Regulation (EU) 517/2014 from April 2018. o Enable HMRC to share F-gas imports data with the relevant regulators to improve enforcement of F-gas quota limits. o Introduce a power for the Secretary of State to appoint the bodies which undertake certification, evaluation and attestation of F-gas handler; o Update names and definitions and make clarifications.				
2.13	Motor Vehicles (Refilling of Air Conditioning Systems by Service Providers) Regulations SI 2009/2194	Environment Agency Local Authority	These Regulations make it a criminal offence for a service provider to refill air conditioning systems in cars and small vans with fluorinated greenhouse gases, where there has been an abnormal leak of refrigerant before repairs have been completed.			???	Vehicle Servicing Records
2.14	Energy Performance of Buildings (England and Wales) Regulations 2012 (SI 2012/3118)	Local Authority – Weights and Measures Department	These Regulations implement key aspects of the Energy Performance of Buildings Directive 2002/91/EC (EPBD) which lays down requirements for the: • Production of energy performance certificates (EPCs) when buildings are constructed, sold or rented out. These are required within 7 days of the building being put on the market, or failing that, a further 21 days. EPCs are valid for 10-years but are not required for industrial buildings. Guidance is available via: https://www.gov.uk/government/publications/energy-performance-certificates-for-the-construction-sale-and-let-of-non-dwellings--2. • Display of energy certificates (DECs) in large public buildings (floor area >250m2). • Minimum 5-yearly inspections of air-conditioning systems with >12kW effective rated output (known as TM44 inspections). Written reports must be provided detailing an assessment of the air-conditioning efficiency and sizing of the system compared to the building's cooling requirements. Advice must be offered on possible improvements to the system, or its replacement and alternative solutions. The Energy Assessors producing EPCs/DECs and undertaking air-conditioning system inspections must be members of an accreditation scheme approved by the Secretary of State. Each scheme ensures that membership is granted only to appropriately qualified individuals.	Detailed guidance from the Department for Communities and Local Government is available via: Enforcement_guidance_Final.pdf.	An EPC is not needed as the site is industrial in nature and a DEC is not required as the site does not contain any large public buildings. Minimum 5 yearly inspections are required >12kW air conditioning systems to advise on energy efficiency and correct sizing.	Maintenance Manager	Air Conditioning Inspection Reports (TM44 Inspections) Evidence of Membership of Appropriate Accreditation Scheme for assessors carrying out TM44 inspections
2.15	Greenhouse Gas Emissions Trading Scheme Regulations 2012 (SI 2012/3038) Greenhouse Gas Emissions Trading Scheme (Amendment) Regulations 2018 (SI 2018/306) Greenhouse Gas Emissions Trading Scheme (Amendment)	Environment Agency	The Regulations establish an EU-wide greenhouse gas emission allowance trading scheme replacing and updating existing Regulations by consolidating them into one statutory instrument, which integrates requirements for aircraft and stationary operators. Detailed provisions are as follows: • Part 1 sets out the relevant definitions and establishes the responsible regulator. • Part 2 contains provisions for stationary installations. A permit must be held by the operator of an installation before a regulated activity can be undertaken. The activities are listed in Annex 1 to Directive 2003/87/EC and a permit can be either a greenhouse gas emissions permit or an excluded installation emissions permit. • Part 3 replaces the provisions previously in the Aviation Greenhouse Gas Emissions Trading Scheme Regulations 2010 and imposes obligations on UK administered operators and aircraft operators who have a responsibility to monitor and report on emissions from aviation activities and to apply for their allocation of aviation allowances. • Part 4 sets out the requirements regarding the surrender of allowances. The operator of an installation or a UK aircraft operator must surrender enough allowances to cover annual reportable emissions for each year. If an insufficient number are surrendered, the deficit is added to the total amount to be surrendered in the following year.	A technical note has been published to outline plans for the UK carbon tax in the event that the UK leaves the EU without a deal: Carbon_Emissions_Tax_-_Technical_Note.pdf.	The Regulations require the site to comply as it produces bulk organic chemicals by cracking, reforming, partial or full oxidation or similar processes, with a production capacity >100 tonnes per day. Sedamyl UK is therefore obligated to participate in the EU ETS.	Environmental Manager	EU ETS records (if relevant)

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
	Regulations SI 2019/528 Greenhouse Gas Emissions Trading Scheme (Amendment) (No. 2) Regulations SI 2019/644 Finance Act 2019 Chapter 1		• Part 5 deals with the enforcement of the Regulations, particularly the powers to serve enforcement notices for contraventions and to determine reportable emissions. • Part 6 states that a regulator may need to provide certain information on how they will carry out their various functions. • Part 7 establishes provisions for civil sanctions, which can be imposed for breaches, including penalty notices and a 'carbon price' is set (£6.70 per tonne of carbon dioxide equivalent) for the penalties which require a calculation to be made to the regulator. • Part 8 provides for appeals against decisions taken under these or EU Regulations. • Part 9 supplements European provisions which requires all allowances issued from 2012 to be held in a Union Registry. In the UK this is administered by the Environment Agency, who must also continue to operate a UK Registry for the Kyoto Protocol. • Part 10 sets out some supplementary provisions, relating to recovery of fees, consequences of non-payment and guidance. There is a centralised EU-wide cap on emissions, which declines annually and aims to deliver a 21% reduction below 2005 emissions by 2020. The EU Directive includes provisions for the introduction of new sectors and gases, along with harmonised rules on free allocation with a move toward greater auctioning of allowances. The establishment of the EU ETS was a major milestone in global efforts to tackle climate change. It was one of the key policies introduced by the EU to help meet their greenhouse gas emissions reduction target of 8% below 1990 levels under the Kyoto Protocol. It works on a 'cap and trade' basis where Member States are required to set an emissions cap for all sectors covered by the EU ETS. These Regulations consolidate, with amendments, all previous Regulations, and require all operators under the EU ETS to monitor and report their emissions for each year. By the following April, they must surrender allowances to account for their annual emissions. One tonne of carbon dioxide equivalent is equal to one EU allowance. Operators receive a partial free allocation to cover their emissions and have the flexibility to buy additional allowances or to sell any surplus allowances generated from reducing their emissions below their allocation. Failure to surrender enough allowances will result in a civil penalty for the operator for each tonne of carbon dioxide equivalent that is not covered by an allowance. The 2018 amendment serves to implement the requirements of Regulation (EU) 2017/2392 to continue the current limitations of scope for aviation activities and to prepare to implement a global market-based measure from 2021. The 2019 Amendment Regulations amended the EU Emissions Trading System (EU ETS) compliance cycle deadline for UK participants for surrendering allowances for the 2018 scheme year from 15 March 2019 to 26 March 2019. Part 3 of the Finance Act 2019 introduces the UK carbon emissions tax which will replace the EU ETS once the UK leaves the EU and sets the carbon price at £16 per tonne. The carbon emissions tax scheme will apply to power generators; certain large industrial premises and manufacturers, including food processing plants; certain public sector facilities; and small emitters and hospitals covered by simplified reporting arrangements. A carbon emissions tax technical note has been published by the Government: https://www.gov.uk/government/publications/carbon-emissions-tax-technical-note. The 2019 Amendment No.2 Regulations amend the Greenhouse Gas Emissions Trading Scheme Regulations SI 2012/3038, by adjusting the EU ETS compliance cycle deadline for UK participants for the 2018 scheme year, to tie in with 'exit day' when the UK will leave the European Union.				
2.16	Building Regulations 2010 (SI 2010/2214)	Local Authorities	Part 6 (and Schedule 1, Part L) detail the energy efficiency requirements for buildings which use energy to condition the indoor climate with some exceptions (listed buildings, buildings in conservation areas, and ancient monuments, places of worship, temporary buildings, industrial sites, workshops and non-residential agricultural buildings with low energy demand; and standalone buildings with a total useful floor area of less than 50m2).		Does not apply as the site is classed as an industrial site.	Environmental Manager	N/A

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
			Where there is a change to a building's energy status, any work must comply with Part L of Schedule 1. Where the renovation of an individual thermal element constitutes a major renovation or amounts to the renovation of more than 50% of the element's surface area, the work must comply with Part L (in relation to limiting heat gains and losses though thermal elements and the building fabric). Any necessary work must be carried out to an educational building or statutory undertaker's building with a total useful floor area >1,000m2 if there is a change to the building's thermal elements. The Secretary of State approves the method for calculating the energy performance of buildings, as well as the minimum energy performance requirements for new buildings through target CO2 emission rates. Where a building is erected, including an educational building or statutory undertaker's building, it must not exceed the relevant target CO2 emission rate. Before and after a building is erected, the person doing the work must notify the local authority of the target and calculated CO2 emission rates. Before starting construction of a new building, the person doing the work must consider the feasibility of high-efficiency alternative systems, such as decentralised energy supply systems based on renewable energy sources; cogeneration; district or block heating/cooling (particularly if based on energy from renewable sources); and heat pumps. That person must no later than the day before work starts, give the local authority notice stating that the analysis has been undertaken, is documented and available for verification/inspection. Where an existing building, including an educational building or a statutory undertaker's building, with a total useful floor area over 1,000m2, undergoes an extension; the initial provision of fixed lighting, heating, hot water, air conditioning or mechanical ventilation systems; or an increase to the installed capacity of any such systems, any necessary additional work must be carried out to ensure that the renovated building as a whole complies with the Part L energy performance requirements. Where a building is erected or modified, the person doing the work must, within 5 days of completion, give an energy performance certificate (EPC) to the owner and notify the local authority. An EPC is only valid for the green deal disclosure obligations if issued by an energy assessor; or produced under the Energy Performance of Buildings (England and Wales) Regulations SI 2012/3118. Part 7 deals with the water efficiency of new dwellings stating the consumption of wholesome water by the occupiers of a new dwelling must be no more than 125 litres per person per day. The person doing the work must notify the local authority of the potential consumption of wholesome water per person per day within 5 days of completion.				
2.17	CRC Energy Efficiency Scheme Order (SI 2013/1119) CRC Energy Efficiency Scheme (Allocation of Allowances for Payment) Regulations SI 2013/3103 CRC Energy Efficiency Scheme (Revocation and Savings) Order SI 2018/841		The CRC Energy Efficiency Scheme is a mandatory carbon emissions reporting and pricing scheme covering UK organisations using more than 6,000 MWh of electricity per year. It applies to emissions not already covered in the EU Emissions Trading Scheme (ETS) or by Climate Change Agreements (CCAs) The Scheme is divided into phases, in line with the dates specified below: • First phase - 1 April 2010. • Initial phase - 1 April 2014. • Second phase - 1 April 2019. Organisations must register as participants two months before the start of the relevant phase and then submit an annual report by the end of July of each reporting year. This enables the administrator to calculate the participant's CRC emissions. In October of each year of a phase, participants need to surrender enough allowances to cover their CRC emissions for that year. The administrator will publish information on a participant's performance for each annual reporting year. Participants must retain evidence of all relevant information under the Scheme in case of audit by the administrator. The effect of the 2018 CRC Energy Efficiency Scheme (Revocation and Savings) Order is that: o The CRC Scheme ended after completion of the final phase on 31 March 2019; o Participants in the final phase still have obligations, such as reporting their emissions by the end of July 2019 and surrendering allowances by the end of October 2019; o The Administrator must maintain the Registry until the end of March 2022;	Detailed guidance is available at: https://www.gov.uk/crc-energy-efficiency-scheme-qualification-and-registration. The CRC Scheme will be scrapped in April 2019 as part of the Government's drive to reduce bureaucracy with a 'final compliance sale' to take place in April 2019.	Sedamyl UK is a participant in the EU ETS, so was not obligated under the CRC. Now that the CRC has been abolished, the increases in the CCL and the Company Reporting requirements	Environmental Manager	Evidence of EU ETS participation

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
			o Accounts for the existing CRC Schemes will be closed on 1 April 2022; o After March 2022, trading of allowances will stop; and o The Administrator must maintain a list of CRC Scheme participants until the end of March 2025.				
2.18	Energy Information Regulations 2011 (SI 2011/1524) Energy Information (Amendment) Regulations (SI 2018/255)	Local Weights and Measures Authority	These Regulations establish a framework for setting energy labelling and standard product information requirements for energy-related products. They apply to energy-related products which have a significant direct or indirect impact through their consumption of energy and essential resources during use. They require the display of electric energy and other essential resources consumption on the product. When placing on the market, or putting into service, products regulated by an EU measure, suppliers must supply a label and a fiche to comply and produce technical documentation sufficient to enable the accuracy of the information to be assessed. Dealers must make the fiche available in the product brochure or any literature which accompanies the product when sold to end-users. When a product is displayed, dealers must attach the label in the clearly visible position specified in the EU measure. The 2018 amendment affects the requirements placed on suppliers and dealers in relation to labelling and the provision of standard product information on the consumption of energy and other resources in relation to certain energy-related products; and scope of the enforcement powers of the authorities responsible for market surveillance to cover these changes.		Only relevant for purchases where consideration should be paid to energy/resource consumption.	???	N/A
2.19	Energy Act 2011 (Chapter 16)	Secretary of State	The Part 1 provisions relate to the green deal and provide for a change in the provision of energy efficiency measures to homes and businesses. They introduce the 'green deal', which is a new financing framework to improve the energy efficiency of households and non-domestic properties. This will be funded by a charge on the property's energy bills which means the consumer will not have to pay for the costs upfront. Also makes it illegal from April 2018 to rent out residential or business premises that do not reach a minimum energy efficiency standard.		Potentially relevant for financing investments in energy efficiency or renting out property.	???	N/A
2.20	Green Deal (Qualifying Energy Improvements) Order SI 2012/2105	Environment Agency	Specifies the energy efficiency improvements which are classed as qualifying energy improvements for the purposes of the Energy Act 2011. The Energy Act 2011 provided for a new type of arrangement for the installation of energy efficiency measures, called a green deal plan. Under a green deal plan, energy efficiency measures are installed in a property and then paid for wholly or partly in instalments which are collected via electricity bills for the property. The following are deemed as qualifying energy efficiency improvements: air source heat pumps; biomass boilers; biomass room heaters (with radiators); cavity wall insulation; chillers; circulator pumps; cylinder thermostats; draught proofing; duct insulation; gas-fired condensing boilers; ground source heat pumps; hot water showers; hot water systems; hot water taps; external wall insulation systems; fan-assisted storage heaters; flue gas heat recovery devices; heating controls for wet central heating systems or warm air systems; heating ventilation and air-conditioning controls (including zoning controls); high performance external doors; hot water controls (including timers and temperature controls); hot water cylinder insulation; internal wall insulation systems (for external walls); lighting systems, fittings and controls; loft or rafter insulation; mechanical ventilation with heat recovery systems; micro combined heat and power; micro wind generation; oil-fired condensing boilers; photovoltaics; pipework insulation; radiant heating; replacement glazing; roof insulation; room in roof insulation; sealing improvements; secondary glazing; solar blinds, shutters and shading devices; solar water heating; transpired solar collectors; under-floor heating; under-floor insulation; variable speed drives for fans and pumps; warm-air units; waste water heat recovery devices attached to showers; and water source heat pumps. The green deal benefited from Government funding which was withdrawn in 2015, so it is now only available via private sector funding.		The scheme may be available if looking to make energy efficiency improvements that require external funding. The green deal scheme was set up so as not to impact on cash flow by permitting repayments via the savings made on energy bills.	Environmental Manager	N/A
2.21	Renewable Heat Incentive Scheme Regulations SI 2018/611	Gas and Electricity Markets Authority (supported by Ofgem)	These Regulations make changes to the Non-Domestic Renewable Heat Incentive Scheme by revoking and replacing the Renewable Heat Incentive Scheme Regulations SI 2011/2860. The Renewable Heat Incentive (RHI) scheme allows owners of power plants which generate heat from specified renewable sources and meet specified criteria to receive payments at prescribed tariffs for the heat used for eligible purposes. The	Detailed guidance on the non-domestic RGI scheme is available from Ofgem at:	Would become relevant if the site decides to install renewable heat energy technologies in which case it would receive RHI	Environmental Manager	N/A

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
	Renewable Heat Incentive Scheme and Domestic Renewable Heat Incentive Scheme (Amendment) Regulations SI 2018/635 Renewable Heat Incentive Scheme and Domestic Renewable Heat Incentive Scheme (Amendment) Regulations SI 2019/1052		Regulations made amendments to the scheme including changes to: the scheme eligibility criteria; methods for calculating and issuing scheme payments; budget control mechanisms; powers to impose sanctions for non-compliances under the scheme; and the levels of tariffs for making payments to scheme participants. The amendments have been made to reform the RHI Scheme in line with the objectives of the Department for Business, Energy and Industrial Strategy to ensure it focuses on long-term decarbonisation, promotes technologies with a credible role to play in that transition, and offers better value for money. Eligible installations include those: o Generating heat from solid biomass or solid biomass contained in waste; o Generating heat using solar collectors; ground source heat pumps; air source heat pumps; o installations which are shared ground loop systems; o installations which are CHP systems or new solid biomass CHP systems; o generating heat using geothermal sources or using biogas. The 2018 Amendment Regulations make various amendments in relation to: the registration requirements for biomethane producers; evidence requirements relating to compliance with environmental legislation; the use of estimated data to calculate periodic support payments; and the introduction of provisions for replacement plant. The 2019 Amendment Regulations make changes to legislation concerning Non-Domestic (and Domestic) Renewable Heat Incentive schemes, as set out in the Renewable Heat Incentive Regulations SI 2018/611. The amendments include: - ensuring that expenditure triggers at which tariff digressions occur align with latest deployment assumptions; - the creation of an extended allocation of Tariff Guarantees to 31 January 2021; - a full review of expenditure triggers based on deployment assumptions. The amendments continue the 2018 reforms to ensure focus on long-term decarbonisation and value for money.	Guidance_volume_1_v5_publish_0.pdf and Guidancevolume2v7finalmarch2016-pdf.	payments for 20-years following installation of qualifying technologies		
2.22	Companies (Directors' Report) and Limited Liability Partnerships (Energy and Carbon Report) Regulations SI 2018/1155 Large and Medium-sized Companies and Groups (Accounts and Reports) Regulations SI 2008/410	HMRC	These Regulations which came into force from 1 April 2019, make changes to the reporting requirements in the Large and Medium-sized Companies and Groups (Accounts and Reports) Regulations SI 2008/410. They insert new requirements on large unquoted companies (as well as quoted companies) to make statements in the Directors' report concerning the company's greenhouse gas emissions, energy use and action taken to increase energy efficiency within the UK. Detailed guidance is available via the following link: Environmental-reporting-guidance-including-secr.pdf The guidance confirms that large unquoted companies using less than 40MWh in the reporting period can disclose themselves as a 'low energy user' and not provide details on energy use, greenhouse gas emissions and energy efficiency measures taken.		As a large limited company, Sedamyl UK will need to provide statements on greenhouse gas emissions, energy use and actions taken to increase energy efficiency within Directors' reports for each financial year that begins after April 2019.	Environmental Manager	Annual Financial Report
2.23	Energy Savings Opportunity Scheme Regulations (SI 2014/1643) Energy Savings Opportunity Scheme (Amendment) (EU Exit) Regulations SI 2018/1342	Environment Agency	The Regulations introduce the Energy Savings Opportunity Scheme (ESOS), which requires all large undertakings or other undertakings under the same group as a large undertaking to audit their energy use in four-yearly cycles. For the purposes of the Regulations, a large undertaking is an undertaking which either employs at least 250 people or which has an annual turnover of more than €50 million and a balance sheet total of €43 million. The initial compliance period for the Scheme was 17 July 2014 to 5 December 2015. Following that, a cycle of subsequent compliance periods begun. Under Part 4 of the Regulations, a responsible undertaking (i.e. person nominated as responsible within the organisation) must carry out an ESOS assessment, which includes an energy audit that is reviewed by a lead assessor (who must be named on an approved register held by the Environment Agency). A responsible undertaking also has a duty to calculate the total energy consumption of a participant to the Scheme.		Applicable as the group has more than 250 employees or a turnover of >€50m and balance sheet €43m, so an ESOS assessment (energy audit) is required every four years or unless the site has an ISO 50001 certified EnMS. To date, the energy audit route to compliance has been adopted with the most	Environmental Manager	ESOS energy audit reports or ISO 50001 certificate

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
			Following this, they can then choose to identify the participant's areas of significant energy consumption. The energy audit must, where practicable: • Analyse energy consumption and efficiency; • Identify any way in which energy efficiency can be improved; • Recommend measures which are practicable and cost effective; and • Identify costs and benefits of any energy saving opportunity. Part 6 offers alternative routes to compliance, which can be achieved through an ISO 50001 certified Energy Management System (EnMS), Display Energy Certificates and Green Deal Assessments. The ESOS Guide, which was updated in February 2019, was published by the Environment Agency to help obligated organisations comply. The 2018 Amendment Regulations serve to address deficiencies in the law which arise as a result of the UK's withdrawal from the EU. They also update to ensure the latest version of ISO 50001 is referenced in the legislation. The 2014 Regulations contain thresholds which, when exceeded, mean the Regulations apply. One of the thresholds is financial and is listed in Euros, so is converted into Pounds. Other small amendments are also made in order to address deficiencies within the law arising from the UK's withdrawal from the EU, which ensure the legislation operates effectively and correctly in the UK after withdrawal.		recent ESOS registration being completed in April 2019.		
2.24	Energy Efficiency (Encouragement, Assessment and Information) Regulations2014 (SI 2014/1403)	Secretary of State (DECC)	These Regulations impose a duty on the Secretary of State to: • Develop programmes to encourage small or medium-sized enterprises to carry out energy audits and provide examples of how energy management systems could be beneficial. • Ensure that information on energy efficiency mechanisms is accessible and provided to relevant market actors. • Promote the energy services market by publishing information about energy performance contracts, the current and future development of the energy services market and a list of energy service providers, and by encouraging the development of quality labels. • Evaluate and, where necessary, act to remove barriers to energy efficiency. The EU set a target of a 20% reduction in CO2 emissions by 2020 (against 2007 business as usual projections) so these Regulations are designed to address that requirement.		Loosely applicable in that the company will need to focus on energy efficiency to comply.	Environmental Manager	N/A
2.25	Capital Allowances (Energy-saving Plant and Machinery) Order SI 2001/2541 Capital Allowances (Environmentally Beneficial Plant and Machinery) Order 2003 (SI 2003/2076) Capital Allowances (Energy-saving Plant and Machinery) Order SI 2018/268 Capital Allowances (Energy-saving Plant and Machinery)	HMRC	Chapter 2 of the Capital Allowances Act 2001 provides for businesses to claim 100% tax relief on first year profits for investments in qualifying environmentally beneficial plant, machinery, and cars. This includes energy saving and water saving equipment to encourage businesses to invest in energy and water efficiency measures, as well as cars with low carbon dioxide emissions. The Capital Allowances (Energy-saving Plant and Machinery) Order 2018 defines eligible energy saving equipment, and breaks it down into the following categories: • air-to-air energy recovery equipment; • automatic monitoring and targeting equipment; • boiler equipment; • compressed air equipment; • heat pumps; • heating, ventilation and air conditioning equipment; • high speed hand air dryers; • motors and drives; • refrigeration equipment; • radiant and warm air heaters; • solar thermal systems; and • uninterruptible power supplies.	Further guidance on the qualifying thresholds for cars used for business is available via: https://www.gov.uk/capital-allowances/business-cars	Relevant for capital expenditure on qualifying energy and water saving technologies, or low emission vehicles, in that the expenditure can be put against taxable profits for the first year following installation.	Environmental Manager	Purchasing records

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
	(Amendment) Order SI 2019/501 Capital Allowances (Environmentally Beneficial Plant and Machinery) (Amendment) Order SI 2019/499 Capital Allowances Act 2001 (Cars Emissions) Order SI 2016/984		The Capital Allowances (Energy-Saving Plant and Machinery) (Amendment) Order 2019/501 amended the Capital Allowances (Energy-saving Plant and Machinery) Order SI 2018/268 to reference the revised Energy Technology Criteria List and Energy Technology Product List. The revised energy technology criteria list is available via: https://www.gov.uk/government/collections/energy-technology-criteria-list-etcl-information-by-categories. The revised energy technology list is available via: https://www.gov.uk/guidance/energy-technology-list. The Capital Allowances (Environmentally Beneficial Plant and Machinery) (Amendment) Order 2019/499 amended the Capital Allowances (Environmentally Beneficial Plant and Machinery) Order SI 2003/2076 to reference the revised Water Efficient Technologies Product List and Water Technology Criteria List. The list of water saving equipment is available via: https://www.gov.uk/government/publications/water-efficient-enhanced-capital-allowances For businesses not eligible for tax relief, the lists can be used as a guide to procurement of energy and water saving technologies. The Capital Allowances Act 2001 (Cars Emissions) Order SI 2016/984 amended the Capital Allowances Act 2001 and a 2017 amendment introduced a reduction in the qualifying carbon dioxide emissions threshold for cars from 130g to 110g per km driven, in relation to expenditure incurred from 1 April 2018.				
2.26	Electricity Capacity Regulations 2014 (SI 2014/2043) Electricity Capacity (Supplier Payment etc.) Regulations 2014 (SI 2014/3354) Electricity Supplier Payments (Amendment) Regulations SI 2018/449 Electricity Capacity (No. 1) Regulations SI 2019/862 Electricity Capacity (No. 2) Regulations SI 2019/1139	Secretary of State	Under the Electricity Capacity Regulations SI 2014/2043, the Secretary of State is required to appoint a Settlement Body, and people awarded capacity agreements in an auction are entitled to receive payments from the Settlement Body for generating or reducing demand for electricity at times of system stress and are liable to make penalty payments to the Settlement Body where the capacity agreement is breached. The Regulations provided for payments to be made by, and to, electricity suppliers for the purposes of the Capacity Market established under the Energy Act 2013, by the Electricity Capacity Regulations SI 2014/2043 and capacity market rules. They also amended the Electricity Capacity Regulations SI 2014/2043, enabling provision to be made in future for electricity interconnectors to become capacity providers. The 2018 Amendment Regulations amend the Electricity Capacity (Supplier Payment etc.) Regulations SI 2014/3354 to provide a revised figure for the settlement costs levy for the next three financial years and subsequent financial years. The revised figure does not apply to any financial year commencing before 2018. The 2019 Amendment (No.1) Regulations amend and modify the Electricity Capacity Regulations SI 2014/2043 and Electricity Capacity (Supplier Payments etc.) Regulations SI 2014/3354 to enable operation of the Capacity Market during the 'standstill period' introduced by the annulment of the scheme's State aid. They also provide for arrangements following a positive State aid decision, mainly to resume collecting charges from electricity suppliers to find deferred payments to capacity providers. The 2019 Amendment (No.2) Regulations amend the Energy Capacity Regulations SI 2014/2043 to: - allow for a one-off capacity market auction in early 2020 to secure electricity capacity for delivery in 2022/23; - extend the requirement to reduce capacity payments to offset support received under other schemes to cover support received by renewable technologies able to participate in future capacity auctions; - modify the calculations used to determine a capacity provider's obligation to repay capacity payments following a termination event. They also made amendments to the Electricity Capacity (No. 1) Regulations SI 2019/862 to: - extend state aid related modifications to credit cover requirements to upcoming early capacity auctions; - modify credit cover requirements applicable following a positive State aid decision to avoid unnecessary duplication of credit cover.		Provides the opportunity to sell surplus electricity from the plant to the grid in peak demand periods. Sedamyl UK has set up this facility to enable additional capacity to be sold on in times of peak demand	Environmental Manager	Payment records
2.27	Electricity (Applications for Licences,	Secretary of State	These Regulations out the information and other documents that must be submitted with applications for: generation; transmission; distribution; supply; interconnector licences; modifications of an area of			Environmental Manager	Payment records

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
	Modifications of an Area and Extensions and Restrictions of Licences) Regulations SI 2019/1023		transmission licences and extensions; restrictions of supply and distribution licences. They specify the form and manner of applications and the manner in which notices of applications are published. These Regulations: - make transitional provisions for applications made but not determined before these Regulations; - provide for general interpretation; - deal with the manner of applications; - concern the form of applications, and incorporate the Full Text of the Schedule to these Regulations that specifies their form, and the information and documents to accompany them; - specify the additional information and documents to accompany applications; - specify the fees payable in respect of applications; - provide for the notice period and publication requirements for applications, and requires applicants to request that the notice of the application is published on the Ofgem website or their own website. If the application is for a restriction, including modification, the applicant must also publish the notice in local newspapers. They also specify the fee increases for licence applications.				

Water

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
3.1	Water Resources Act 1991	Environment Agency	Part 2, Chapter 2 deals with the regulation of water abstraction and impounding activities. It imposes a licensing requirement for water abstraction activities - significant changes have been introduced by The Water Act 2003 (see below). Water abstractions >20m3 per day need an abstraction licence. Part 3 makes provision for the Secretary of State to classify water quality and set water quality objectives and Part 4 deals with the functions of the Environment Agency in relation to flood defence. Part 7 deals with anti-pollution works and their operations and allows the Environment Agency to carry out any necessary works and operations, where they believe any poisonous, noxious or polluting matter, or any solid waste, is likely to enter, or is present, in any controlled waters. They can also serve an anti-pollution works notice on anyone causing pollution of controlled waters. The system of consents for discharging water that was previously set out under this Act is now dealt with by environmental permits under the Environmental Permitting (England and Wales) Regulations 2016. The Full Text of Schedule 21 to those Regulations deals with water discharge activities. Under Section 85, it is an offence to cause or knowingly permit any poisonous, noxious or polluting matter, solid waste, trade effluent or sewage effluent to enter controlled waters without a discharge consent or environmental permit.		The site has an abstraction licence covering abstractions from the River Ouse. This requires monitoring against strict abstraction limits. It also has an environmental permit covering discharges from the effluent treatment plant to the River Ouse under the terms of the environmental permit.	WWTP Manager	Abstraction Licence Abstraction Monitoring Records Environmental Permit
3.2	The Water Act 2003	Environment Agency	The Act promotes the sustainable use of water resources and water conservation. Water abstractions >20m3 per day require an abstraction licence and abstractors have a responsibility not to let their abstraction cause damage to others. Part 1 made considerable amendments to the Water Resources Act 1991 regarding abstraction and impounding. New provisions were also established, including restrictions for existing impounding works and withdrawal of compensation. Part 2 made considerable amendments to the Water Industry Act 1991 regarding new regulatory arrangements. It also transferred functions from the Director General of Water Services to the Water Services Regulation Authority.		The site has an abstraction licence covering abstractions from the River Ouse. This requires monitoring against strict abstraction limits.	WWTP Manager	Abstraction Licence Abstraction Monitoring Records

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
			Part 3 made miscellaneous amendments to the Water Resources Act 1991 and Water Industry Act 1991. New provisions were also established regarding the Drinking Water Inspectorate, penalties, a duty to encourage water conservation and water conservation by public authorities.				
3.3	Water Resources (Abstraction and Impounding) Regulations 2006 (SI 2006/641)	Environment Agency	Prescribes how a licence application to abstract or impound water should be made and how the Environment Agency must deal with it in light of amendments made to the Water Resources Act 1991 by the Water Act 2003. The Regulations specify: • The information required to support a licence application. • The information to be included in the Environment Agency's acknowledgement of receipt of the application. • The advertising arrangements and the circumstances where advertising may be avoided. • How the Environment Agency deals with the application. • The time limits within which appeals must be made and the procedures for appealing.		The site has an abstraction licence covering abstractions from the River Ouse, so the application had to follow these requirements.	WWTP Manager	Water Abstraction Licence Abstraction Monitoring Records
3.4	Environmental Permitting (England and Wales) Regulations 2016 SI 2016/1154 Environmental Permitting (England and Wales) (Amendment) (EU Exit) Regulations SI 2019/39	Environment Agency	These Regulations integrate the former water discharge consent and groundwater authorisation regimes. Schedule 21 deals with the need to obtain an environmental permit for any water discharge activities as follows: • The discharge or entry to inland freshwaters, coastal waters or relevant territorial waters of any: (i) poisonous, noxious or polluting matter, (ii) waste matter, or (iii) trade effluent or sewage effluent. • The discharge from land through a pipe into the sea outside the seaward limits of relevant territorial waters of any trade effluent or sewage effluent. • The removal from any part of the bottom, channel or bed of any inland freshwaters of a deposit accumulated by reason of any dam, weir or sluice holding back the waters, by causing it to be carried away in suspension in the waters, unless the activity relates to land drainage, flood prevention or navigation. • The cutting or uprooting of a substantial amount of vegetation in any inland freshwaters or so near to any such waters that it falls into them and failure to take reasonable steps to remove the vegetation from these waters. Any discharge of trade effluent or sewage effluent into a lake or pond now requires an environmental permit, as do any discharges/releases to groundwater (under Schedule 22). The 2019 Amendment Regulations address references to EU Directives that will not legally function once the UK leaves the EU.	Guidance on the monitoring of discharges to sewer (and water) is available via: https://www.gov.uk/government/publications/m18-monitoring-of-discharges-to-water-and-sewer	Applies to Sedamyl UK and dealt with within the scope of the environmental permit. This covers the discharge of treated effluent into the River Ouse from the effluent treatment plant. Pollution of the River Ouse must be avoided.	WWTP Manager	Environmental Permit Water Discharge Monitoring Reports
3.5	Water Industry Act 1991	Sewerage Undertaker	Occupiers of trade premises may not discharge any trade effluent into a public sewer unless authorised by the sewerage undertaker as set out in Part 4 of the Act. It is the responsibility of a sewerage undertaker to provide a public sewer for the drainage of domestic sewerage in its area and it is prohibited for the occupier of any trade premises to discharge trade effluent into a public sewer without the sewerage undertaker's consent. Such a consent can be subject to various conditions. Trade effluent can include: waste chemicals, including oils; liquid process wastes; detergents; condensate water from compressed air installations; cooling water; biodegradable liquids; wash water; and liquid wastes or wash waters, other than domestic sewage, discharged using sinks, basins or toilets, and contaminated mine or quarry water. Part 3A also places a responsibility on water undertakers to promote water efficiency to customers.		The site treats its own waste water, so has an environmental permit covering discharges to controlled waters rather than a trade effluent consent for discharges to foul sewers.	Environmental Manager	Environmental Permit Water Discharge Monitoring Reports
3.6	The Trade Effluents (Prescribed Processes & Substances) Regulations 1989 (SI 1989/1156)	Sewerage Undertaker Environment Agency	Permission from the sewerage undertaker is required to: • Discharge or permit the discharge of any trade effluent into a foul sewer. • Discharge any surface water run-off from hard surfaces contaminated with oil, such as car parks or maintenance bays, to foul sewer. • Wash substances e.g. oils, solvents, chemicals, adhesives, inks or powders into foul sewers. • Use a sink, basin, toilet or gully for disposing of any liquid wastes, apart from domestic sewage, or discharging wash waters.		As above – see 3.5.	Environmental Manager	Environmental Permit Water Discharge Monitoring Reports

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
			Some effluents are subject to prior authorisation by the Environment Agency (EA) e.g. effluents from installations subject to the environmental permitting regime and certain effluents containing dangerous substances. The EA's requirements may differ to those of the sewerage undertaker in which case the most stringent limits will always apply.				
3.7	Control of Pollution (Oil Storage) (England) Regulations 2001 SI 2001/2954)	Environment Agency	Applies to the external above ground storage of oil >200 litres and sets out measures to prevent pollution of controlled waters. The Regulations do not apply to waste oil or below ground storage. Oil must be stored in containers of sufficient strength and structural integrity to prevent leaks. In addition, there must be a secondary containment system (bund) with a capacity of at least 110% of the tank or 25% of the total contents of all tanks if there is more than one within the bund. The base and walls of the bund must be impermeable to water, not penetrated by anything and all fill points and pipework should be within the bund. Where this is not possible, drip trays should be used as a secondary containment measure. Separate provisions are set out for fixed tanks and mobile bowsers.		Applies to any external oil storage above 200 litres e.g. diesel oil for back-up generators.	Environmental Manager	N/A
3.8	Salmon and Freshwater Fisheries Act 1975	Environment Agency	It is an offence for any person to cause or knowingly permit any liquid or solid matter to enter fish containing waters or to cause the waters to be poisonous or injurious to the fish, spawn or food of fish.		Must avoid polluting the River Ouse through discharges from the site (i.e. effluent treatment plant).	WWTP Manager	Environmental Permit Water Discharge Monitoring Reports
3.9	The Anti-Pollution Works Regulations 1999 (SI 1999/1006)	Environment Agency	These Regulations, under Section 161 of the Water Resources Act, empower the EA to deal with actual or potential pollution of controlled waters. The EA can raise a works notice on polluters or potential polluters and has the power to carry out the work itself and recover costs and expenses from the polluting party. Details of the works notice and appeals procedures are also stipulated.		Only potentially relevant in the case of a pollution incident that originates from our site.	Environmental Manager	N/A
3.10	Urban Waste Water Treatment (England and Wales) Regulations 1994 (SI 1994/2841)	Environment Agency	These Regulations impose requirements regarding industrial waste water discharges and monitoring. They are made in accordance with the Water Industry Act 1991 and implement the Urban Waste Water Treatment Directive. It is the responsibility of the Environment Agency, with regard to industrial waste water discharges, to ensure that the requirements of Schedule 4 are met for that discharge. Schedule 4 specifies that industrial waste water entering collecting systems and urban waste water treatment plants will be subject to such pre-treatment as required to ensure that: • The health of staff working in collecting systems and treatment plants is protected; • Collecting systems, waste water treatment plants and related equipment are not damaged; • The operation of the waste water treatment plant and treatment of sludge is not impeded; • Discharges from the treatment plants do not adversely affect the environment, or prevent receiving waters from complying with other EC Directives; and • Sludge can be disposed of safely in an environmentally acceptable manner. The Regulation applies to discharges of biodegradable industrial waste water from plants belonging to the following industrial sectors which do not enter urban waste water treatment plants before they are discharged into receiving waters: milk processing; manufacture of fruit and vegetable products; manufacture and bottling of soft drinks; potato processing; meat industry; breweries; production of alcohol and alcoholic beverages; manufacture of animal feed from plant products; manufacture of gelatine and glue from hides, skin and bones; malt houses; and fish-processing industry. The Environment Agency must impose, in every environmental permit, conditions on the discharge which are appropriate to the nature of the discharge.		Applies to the effluent treatment plant on site, which is dealt with via the site's environmental permit.	WWTP Manager	Environmental permit Effluent treatment plant monitoring records
3.11	Water Supply (Water Fittings) Regulations 1999 (SI 1999/1148)	Water Suppliers	These Regulations aim to prevent the misuse, waste, undue consumption, erroneous measurement and contamination of drinking water. Owners, occupiers and installers of plumbing systems/water fittings have a legal duty to ensure such systems comply. Water fittings must not be installed, connected, arranged or used in way that is likely to cause the above and every water fitting must be of appropriate quality or standard, suitable for use, and installed, connected, altered, repaired		Requires fitting of non-returnable valves to water fittings on drinking water services, conservation of water via any newly installed water fittings and use of approved contractors for plumbing work.	Maintenance Manager	Maintenance Records

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
			or disconnected in a workmanlike manner. If planning to carry out certain plumbing work, prior consent must be obtained from the water company by giving advanced notice. This includes installing water fittings in connection with the: a) Erection of any new building or structure; b) Extension or alteration of the water system in any premises except a domestic dwelling; c) Material change in use of any premises; d) Installation of any fitting listed in section 5; e) Construction of a large pond or swimming pool with automatic replenishment. The Regulations also introduced the concept of an approved contractor i.e. plumbers who are competent in the requirements of the Regulations. They are not applied retrospectively so work carried out in line with the previously in force Water Supply Regulations is deemed to be compliant.				

Nuisance

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
4.1	Environmental Protection Act 1990 (Part III)	Local Authority	Part III of the Act requires each local authority to inspect the area under its control and check for any statutory nuisances. They must also be receptive to any complaints made by local inhabitants or occupiers of buildings and where necessary serve an Abatement Notice requiring a halt to the nuisance and/or prevention of its recurrence. Statutory nuisances have been established in several pieces of legislation but are consolidated within this Act under Schedule 3. The following are classed as statutory nuisances insofar as they are prejudicial to health or a nuisance: • Any premises in a poor state or condition; • Smoke emitted from premises; • Fumes or gases emitted from premises; • Any dust, steam or other effluvia from industrial, trade or business premises; • Any accumulation or deposit; • Any water covering land or land covered with water, in Scotland • Any animal kept in such a place or manner; • Any insects emanating from relevant industrial, trade or business premises; • Artificial light emitted from premises or a stationary object; • Noise emitted from premises; • Noise emitted from/caused by a vehicle, machinery or equipment on a street or road; and • Any other matter declared by any enactment to be a statutory nuisance. Part 4 deals with littering and makes it an offence to discard litter in the open-air including cigarette butts, chewing gum, etc. Open air includes buildings with one side open to the air. Local authorities have the power to issue fixed penalty notices in the event of such offences. An abatement notice can be served by the local authority when it is satisfied that a statutory nuisance exists or is likely to occur.		The site has no nuisance issues due to its low sensitivity and effective sound insulation in those buildings where loud machinery is in use. The environmental permit lays out specific requirements relating to odour and noise monitoring.	Environmental Manager	Noise and odour monitoring records
4.2	Noise and Statutory Nuisance Act 1993 Chapter 40	Local Authority	Deals with noise emitted from vehicles, machinery or equipment in a street, audible intruder alarms. Intruders alarm on office and company vehicles. The Act makes provisions regarding consents to operate loudspeakers in streets or roads; and the installation of audible intruder alarms. They also provide for authorised officers to enter any premises to turn off or deactivate an alarm, in certain circumstances.		The site has no noise nuisance issues due to its low sensitivity and effective sound insulation in buildings where loud plant is in use. The environmental permit lays out specific noise monitoring requirements.	Environmental Manager	Noise monitoring records
4.3	The Statutory Nuisance (Appeals) Regulations 1995 (SI 1995/2644)	Local Authority	These Regulations add further grounds for appeal against an abatement notice. Grounds for appeal include: a) Unreasonable amount of time given for complying with a notice, or unreasonable requirements; b) An error in the notice; c) That it should be served on someone else; d) In the case of a notice served on a trade or business premises, that the best practicable means was used to prevent or counteract the effects of the nuisance. When an appeal has been lodged, the notice will be suspended pending determination of the appeal if compliance would result in expenditure, or the noise was caused by undertaking a task imposed by law, with few exceptions.		As above	Environmental Manager	Noise and odour monitoring records
4.4	Anti-Social Behaviour Act 2003 (Part 6)	Local Authority	Part VI of the Act deals specifically with the environment. The chief executive office of a local authority can issue a closure notice of premises, where it is believed that a public nuisance is being caused by noise from the premises and that closure is necessary to prevent nuisance.		As above	Environmental Manager	Noise and odour monitoring records
4.5	The Noise Emissions in the Environment by Equipment for use Outdoors Regulations 2001 (SI 2001/1701)	Vehicle Certification Agency	Equipment for use outdoors listed in Schedule 1 is subject to noise limits. Equipment listed in Schedule 2 must carry an EC mark to demonstrate compliance with legal requirements. The equipment covered by Schedule 1 includes construction and demolition equipment, compressors (<350kW) and lawnmowers (>20kW). The equipment in Schedule 2 includes conveyor belts, equipment for loading and unloading silos or tanks on trucks, hedge trimmers, high pressure flushers and water jet machines, power generators (>400kW) and water pump units.		Applies to the use of equipment by contractors when working externally at the site – EC mark can be checked to confirm compliance and noise levels can be checked if using equipment listed under Schedule 1.	Technical Department	EC mark
4.6	Control of Pollution Act 1974 (Chapter 40)	Secretary of State	Part 3 on noise has largely been replaced by the Environment Protection Act 1990 but some provisions still apply including those relating to noise from construction sites, streets, plants or machinery, noise abatement zones and consents for work on construction sites.		See above (4.1)	Environmental Manager	Noise and monitoring records

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
4.7	Clean Neighbourhoods and Environment Act 2005	Local Authority	The Act improves the powers, duties and guidance for dealing with the problems associated with local environmental quality, to maintain a clean and safe environment. • Part 1 deals with crime and disorder and amends legislation to consider anti-social behaviour which affects the local environment. • Part 2 deals with vehicles and introduces provisions for nuisance parking and abandoned and illegally parked vehicles. • Part 3 deals with litter/refuse and extends the offence for dropping litter to all open places. • Part 4 deals with graffiti/defacement and amends the Anti-Social Behaviour Act 2003, regarding graffiti, fly-posting and illegally displayed advertisements. • Part 5 deals with waste and makes some minor provisions regarding registration of carriers; fly-tipping; powers to collect and dispose of waste; and site waste management. • Part 6 deals with offences relating to dogs. • Part 7 deals with noise and contains provisions relating to designating alarm notification areas; nominating key-holders; and powers of authorised officers relating to alarms. • Part 9 provides details on fixed penalty notices for any offences committed under the above.		The site has no issues under this legislation.	Environmental Manager	Relevant Monitoring Records (as applicable)
4.8	Anti-social Behaviour, Crime and Policing Act 2014 Chapter 12	Local Authority Police Service	Part 3 deals with the powers to close a premises that is seen to be causing a nuisance. Although a statutory nuisance can often be difficult to define, it can be considered as something that is prejudicial to peoples' health or can interfere with their legitimate use and enjoyment of land or property. A police officer (ranked Inspector or higher) or the local authority can issue a closure notice if the use of particular premises has resulted, or is likely to result, in nuisance to members of the public; or there has been, or is likely to be, disorder near those premises that is associated with the use of the premises. Such a notice can prohibit access by all except those specified. It can only be issued if reasonable efforts have been made to inform anyone living on the premises; and with control, interest or responsibility for the premises that the notice is going to be issued. The maximum period that can be specified in a closure notice is typically 24 hours (48 hours in certain cases).		The site has no issues under this legislation.	Environmental Manager	N/A
4.9	Highways Act 1980 Chapter 66	Local Authority	Chapter 66 of the Act makes it an offence for anyone without lawful authority or excuse, to: • Obstruct free passage along a highway; • Erect a building or fence, or plant a hedge, in a highway; • Deposit a builder's skip on a highway without permission from the highway authority; • Plant trees or shrubs in a carriageway, or within 15 feet of the centre of a carriageway; • Deposit anything on a highway, which results in a user being injured or endangered; • Light any fire on or over a highway; or • Discharge any firearm or firework within 50 feet of the centre of a highway; • Play football or any other game on a highway to the annoyance of a user of the highway; or • Allow any filth, dirt, lime or other offensive matter to run or flow onto a highway from any adjoining premises.		The site has no issues under this legislation.	Environmental Manager	N/A

Contaminated land

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
5.1	Environmental Protection Act 1990 (Part IIa)	Local Authority Environment Agency	Part 2A deals with the identification and remediation of land where contamination poses an unacceptable risk to human health or the environment. It differentiates between contaminated land and special sites. It also determines liability for remediation, as well as the information to be held on public register. Local Authorities have a duty to inspect their land to identify whether it is contaminated. Following identification of contaminated land, the Local Authority must inform the appropriate parties (including the landowner). High risk sites may be designated as Special Sites, which are regulated by the EA. Remediation notices will be served for Special Sites, specifying what needs to be done and by when.		To comply, Sedamyl UK must avoid contamination of the site or surrounds via careful management of potential contaminants. Also requires mitigation of any past contamination.	Environmental Manager	Contaminated land surveys/reports Soil quality data
5.2	Environment Act 1995	Local Authority Environment Agency	Part 2 amended the Environmental Protection Act 1990 by inserting Part 2A which placed a responsibility on local authorities to identify contaminated land within their areas.		As above	Environmental Manager	Contaminated land surveys/reports Soil quality data
5.3	Contaminated Land (England) Regulations 2006 (SI 2006/1380)	Local Authority Environment Agency	These Regulations implemented Part IIA of the Environmental Protection Act 1990 and are based on Local Authorities inspecting their areas and identifying contaminated land. Formal notice is given where contaminated land is identified, and the authority will establish the appropriate person(s) to bear responsibility for remediation and specify what is required. They will ensure remediation occurs by: 1) agreement with those responsible; 2) serving a remediation notice; and/or 3) undertaking work themselves. Liability for the remediation costs will, where feasible, follow the 'polluter pays' principle. There are two classes of person or liability group. Class A refers to the person or group that 'caused or knowingly permitted' a pollutant to be present. Class B refers to those who are owners or occupiers of land where no Class A person can be found. These Regulations also identify those categories of site (known as 'special sites') where the EA becomes the enforcing authority. Local authorities are the enforcing authority for other types of contaminated site. Land contamination should be avoided via safe and effective storage, handling and use of oils, fuels, pesticides, etc. If past contamination is suspected, then a specialist Desk Top Study should be arranged to assess the nature and extent of contamination. The relevant enforcing authority must keep a public register of information relating to contaminated land, which includes details on: remediation notices; appeals against remediation notices; designation of special sites; convictions for offences; and other environmental controls.		These Regulations require Sedamyl UK to avoid contamination of the site or surrounds via careful management of potential contaminants. Also requires mitigation of any past contamination	Environmental Manager	Contaminated land surveys/reports Soil quality data
5.4	Environmental Damage (Prevention and Remediation) Regulations 2015 (SI 2015/810)	Environment Agency	These Regulations impose obligations on operators of economic activities requiring them to prevent or remediate environmental damage. They apply to damage to protected species, natural habitats, sites of special scientific interest (SSSIs), water and land and implement Directive 2004/35/EC, on environmental liability.		Again, Sedamyl UK must avoid pollution or environmental damage to the site or surrounds.	Environmental Manager	Contaminated land surveys/reports Soil quality data

Conservation and Wildlife

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
6.1	Wildlife and Countryside Act 1981 (Chapter 69)	Natural England	The main aim of the Act is to make provisions for prohibiting various methods of killing or taking wild animals, protecting mammals, and restricting the introduction of certain plants and animals. It also deals with nature conservation, the countryside, national parks and public rights of way. Part 1 on wildlife, deals with the		Requires Sedamyl UK to avoid harm to wildlife or their habitat and to avoid damage to protected areas	Environmental Manager	Ecological survey/ reports

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
			protection of wild birds and their nests and eggs; captive birds; certain wild animals; certain mammals; and wild plants. Special areas of protection are designated for each of the above, as well as provisions for exemptions, licences and offences. Part 2 on nature conservation, the countryside and National Parks provides for the protection of specific areas of land, due to their geological and geophysical features and their fauna/flora/wildlife. As a result, they designate relevant areas as: Sites of Special Scientific Interest (SSSIs); Limestone Pavement Areas; National Nature Reserves (NNRs); and Ramsar sites. The protection of countryside areas is also dealt with through management agreements and the conservation and maintenance of National Parks. It is an offence 'to plant or otherwise encourage' the growth of Japanese Knotweed and other invasive species (e.g. Giant Hogweed, Himalayan Balsam).				
6.2	Natural Environment and Rural Communities Act 2006 (Chapter 16)	Environment Agency	The Act addresses a range of issues relating to the natural environment by making provisions regarding biodiversity, pesticides harmful to wildlife, the protection of birds, and invasive non-native species. The Act also establishes Natural England, which is the integrated Agency that champions the conservation and enhancement of the wildlife of England and strengthens the enforcement powers to aid wildlife protection		As above (6.1)	Environmental Manager	N/A
6.3	Countryside and Rights of Way Act 2000 Countryside and Rights of Way Act 2000 (Review of Maps) (England) Regulations SI 2019/1069	Natural England	Part I deals with the protection of animals and plants. Part II is concerned with general nature conservation and habitats/site protection through designation of site of special scientific interest (SSSIs) and National Nature Reserves (NNRs). It contains major amendments to the law relating to nature conservation, by strengthening protection of SSSIs with extensive powers made available to Natural England to maintain and preserve these sites. Part III on nature conservation and wildlife enforcement amends the Wildlife and Countryside Act 1981, to set a greater level of environmental protection to wildlife and natural features through the conservation of biological diversity and the enforcement of legislation. It also issues some new provisions regarding SSSIs. Part IV outlines plans for the better management and protection of areas of outstanding natural beauty (AONBs), through designating such areas by order and the creation of conservation boards to conserve and enhance their natural beauty, increase public understanding and enjoyment, encourage the economic and social well-being of local communities, protect the interests of the countryside and avoid pollution. The 2019 Regulations amend the Countryside and Rights of Way Act 2000 in relation to England. The Act specifies the intervals at which Natural England is required to review a map issued in conclusive form under the Act, showing registered common land and open country in England. These Regulations change the timing of the first such review from no more than 15 years after the issue of the map, to no more than 20 years.		We need to identify any protected sites on or near to the site and take steps to prevent damage – no such sites appear to exist on or near to the site.	Environmental Manager	N/A
6.4	Protection of Badgers Act 1992	Natural England	Provides protection to badgers and badger setts and makes it an offence to kill, injure, ill-treat or take a badger of interfere with its sett.		Where badgers are known to occupy or inhabit the site, we must not interfere with them.	Environmental Manager	N/A
6.5	Conservation of Habitats and Species Regulations SI 2017/1012 Conservation of Habitats and Species (Amendment) (EU Exit) Regulations SI 2019/579	Natural England	These Regulations revoke the Conservation of Habitats and Species Regulations 2010 by consolidating the 30 amendments which have been made over the years and which rendered the previous Regulations difficult to work with. They aim to maintain biodiversity through the conservation of natural habitats and wild fauna and flora, including wild birds. They established a coherent European ecological network of sites of Community interest known as 'Natura 2000'. A habitat type is defined as being of Community interest if it is in danger of disappearance within its natural range or has a small natural range. Species are of Community interest if they are endangered (with some exceptions), vulnerable, rare or endemic and require particular attention. The Natura 2000 network is established to ensure that selected habitats and species are maintained at, or restored to 'favourable conservation status'. The Regulations also allow for designation of Special Areas of Conservation (SAC), Sites of Community Interest and Special Protection Areas (SPA), collectively known as 'European Sites', and to take various measures to protect habitats and species both within and beyond them. They implemented the EU Habitats Directive for conservation of natural habitats and wild flora and fauna. The 2019 Amendment Regulations, which come into force on the UK's day of exit from the European Union, make amendments to legislation in the field of biodiversity protection that implement the requirements of		All bat species are protected under this legislation, so appropriate surveys should be conducted in sensitive areas before undertaking activities that may cause disturbance, (e.g. building/refurbishment work) to avoid any significant disturbance. There are no Natura 2000 or European sites on or nearby	Environmental Manager	N/A

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
			Directive 92/43/EEC, on the conservation of natural habitats and of wild fauna and flora, and Directive 2009/147/EC, on the conservation of wild birds. The amendments seek to address failures in the legislation when the UK leaves the EU, to ensure that the legislation operates effectively after exit day.				
6.6	Hedgerow Regulations 1997 (SI 1997/1160)	Local Authority	Makes it illegal to remove a protected hedge without prior permission from the Local Authority.		Need to check with Selby District Council prior to removing or cutting back any hedgerows.	Environmental Manager	Local Authority Consent
6.7	Town and Country Planning (Tree Preservation) (England) Regulations SI 2012/605	Local Planning Authority	These Regulations provide the Local Planning Authority (LPA) with the power to serve Tree Preservation Orders (TPOs) to protect specified trees and woodlands. The principal effect of a TPO is to prohibit the cutting down, uprooting, topping, lopping, wilful damage, or wilful destruction of trees without LPA consent. The cutting of roots, although not expressly covered, also requires LPA consent. The 2012 Regulations sought to simplify the previous Regulations as part of the Government's ambition to cut red tape.		Need to check with Selby District Council prior to removing or cutting back any trees.	Environmental Manager	Local Authority Consent
6.8	Wild Mammals Protection Act 1996	Natural England	The Act gives officers more power to prosecute those causing unnecessary and unlawful suffering to wild animals. Under the Act, any person who is responsible for cruelty towards a wild mammal with intent to inflict unnecessary suffering is guilty of an offence. The Act also gives the courts power to confiscate any vehicle or equipment used in the commission of the offence, and can order their disposal or destruction.		Sedamyl UK must avoid harm or interference with any mammals on the site.	Environmental Manager	N/A
6.9	Weeds Act 1959 Chapter 54	Defra	Sets out the powers of Defra for dealing with injurious weeds such as broad leaved dock, ragwort, spear thistle, creeping or field thistle and curled dock. Defra can serve notice on the occupiers of any land where injurious weeds are found to be growing to take actions to prevent the weeds from spreading. Where such a notice is not complied with, Defra can take the action themselves and recover the costs of doing so.		The spreading of weeds should be avoided, and the site should be inspected regularly to identify injurious weeds.	Environmental Manager	N/A
6.10	Timber and Timber Products (Placing on the Market) Regulations SI 2013/233 Timber and Timber Products and FLEGT (EU Exit) Regulations SI 2018/1025	Environment Agency	These Regulations aim to eliminate demand for illegally harvested timber and timber products by prohibiting the placing of illegally harvested timber on the EU market. Those who introduce timber and timber products to the EU are defined as Operators and must carry out a risk management of their supply chain (due diligence); and use a risk-based approach to ensure they do not place illegally harvested timber or timber products on the EU market. Those who trade in timber and timber products that have already been placed on the EU market are defined as Traders and must keep specific information to enable such products to be traced. The UK Government is committed to making the import or possession of illegal timber a criminal offence. These Regulations therefore set new offences for: • Placing illegally harvested timber or timber products on the EU market; • Failing to carry out due diligence when placing timber or timber products on the EU market; and • Failing to maintain and evaluate the due diligence system used. An inspector who has entered premises for enforcement purposes can seize and remove any timber they believe has been illegally harvested and placed on the market. The 2018 EU Exit Regulations make amendments to legislation concerning the import and placing on the market of timber and timber products to ensure that the protection they provide against illegally harvested timber continues to be effective after Brexit.		Relevant to the purchase of timber products e.g. furniture, wooden pallets, paper, etc. Need to ensure that suppliers comply by requesting their traceability records.	Purchasing department	Purchasing records – FSC / PEFC certificates for key suppliers
6.11	Public Health Act 1936 Prevention of Damage by Pests Act 1949 Pests Act 1954	Local Authority	In the UK, several pieces of legislation address pests and pest prevention, with those listed here seen as the most relevant. Some mammals and birds are considered pests and may need to be controlled legally, normally by the occupier of the land, as part of countryside management. Control of some species of birds for certain purposes can be carried out under a General Licence. To control certain species such as rats, mice, rabbits and foxes, there is no requirement for a licence. A licence is required to take action against protected species or use particular control methods. Control methods include trapping, shooting or chemical control using fumigants or rodenticide baits, with a combination often proving most effective. The Public Health Act 1936 gives local authorities the power to serve notice requiring necessary action to be taken to kill or remove vermin. Vermin is defined as 'in its application to insects and parasites includes their eggs, larvae and pupae.'		Need to keep the site tidy and vermin free.	Pest Control Assignee	Pest control records

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
			The Prevention of Damage by Pests Act 1949 gives local authorities the duty to secure, as far as is practically possible, a district kept clear of rats and mice in particular. This enables them to carry out periodical inspections of land and premises; to kill rats and mice on land occupied by the authority, and to enforce the duties of owners and occupiers. Occupiers of non-agricultural land must notify their local authority if rats and/or mice are present on their land in substantial numbers; and authorities may serve notice on the owner/occupier to take action within a specified period. Under the Pests Act 1954, the whole of England is classed as a Rabbit clearance area so occupiers have a continuing obligation to control Rabbits living on, or resorting to their land. An occupier within a Rabbit clearance area has unrestricted rights to kill Rabbits on their land by any lawful means except shooting. The Act makes it is an offence to use a spring trap for the purposes of killing or taking animals unless the trap is approved by Order				
6.12	Environment and Wildlife (Legislative Functions) (EU Exit) Regulations SI 2019/473	Natural England Selby District Council	These Regulations make amendments to retained direct EU legislation in the area of environment and wildlife in order to transfer a series of legislative functions that are currently conferred on the European Commission, to be exercisable instead by UK public authorities. This will allow the legislation to remain operable in the UK after the UK leaves the EU.				N/A

Hazardous substances

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
7.1	Planning (Hazardous Substances) Act 1990 Planning (Hazardous Substances) Regulations SI 2015/627 Planning (Hazardous Substances) (Amendment) Regulations SI 2017/365 Planning (Hazardous Substances and Miscellaneous Amendments) (EU Exit) Regulations SI 2018/1234	Hazardous Substances Authority (Local Planning Authority)	Under the Act, the presence of a hazardous substance on, over or under land above a specified quantity will require consent from the hazardous substances authority (HSA). This Act provides for local authorities to act as the HSA and to take into account the current and contemplated use of the land and its surroundings when determining applications. The Act provides for public registers to be maintained containing full details of applications, consents, conditions etc. and enables local authorities to monitor and control the presence of hazardous substances in their area. The 2015 Regulations set out the: • Substances which are hazardous substances for the purposes of the Planning (Hazardous Substances) Act 1990; • Procedures to be followed for applications for hazardous substances consent; • Procedures for the enforcement of hazardous substances control; • The information to be held in a consents register, the fees required in connection with an application for hazardous substances consent, and how hazardous substances control applies to hazardous substances authorities; • Obligations to take certain matters in Directive 2012/18/EU, on the control of major-accident hazards involving dangerous substances, into account in land use planning policies and other relevant policies, and public consultation and participation obligations in relation to certain plans, programmes and projects where the presence of hazardous substances is relevant. This Act also enforces the Planning (Control of Major Accident Hazards) Regulations 1999 which implement Article 12 of Council Directive 96/82/EC on the control of major accident hazards involving dangerous substances. Schedule 1 lists the substances which are considered as hazardous. The 2017 amendment to the Planning (Hazardous Substances) Regulations 2015 clarifies a rule about how controlled quantities are calculated where two or more hazardous substances are present together but individually their amounts fall below the usual controlled quantities. The rule must be applied in relation to each of three hazard groups (health, physical, and environment hazards) to assess whether such substances require consent. When applying the rule, no account is to be taken of substances present within the establishment which		This does not apply due to the lack of hazardous substances above stated thresholds.	Health & Safety Manager	Purchasing Records

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
			exceed the controlled quantity. For each hazard group, the lowest controlled quantity for that group should be used. The 2018 Amendment Regulations amend legislation relating to town and country planning and infrastructure planning to remove deficiencies as a result of the UK's exit from the EU, such that it works efficiently following the withdrawal. Many references to EU Directives are replaced or removed.				
7.2	Regulation (EC) 1907/2006 on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and Establishing a European Chemicals Agency REACH Enforcement Regulations 2008 (SI 2008/2852) REACH etc. (Amendment etc.) (EU Exit) Regulations SI 2019/758	Health and Safety Executive	The REACH Regulations cover chemicals manufactured or imported into the EU in quantities >1 tonne per calendar year, requiring importers or manufacturers to register them with the European Chemicals Agency (ECHA). Registration must be by 2010, where >1,000 tonnes are manufactured or imported per year, or the substances are of the highest concern; 2013, where 100 to 1,000 tonnes are manufactured or imported per year; and 2018, where 1 to 100 tonnes are manufactured or imported per year. End-users are largely unaffected although REACH should improve matters by providing better information on chemicals and their safe use. Information on the hazards of chemicals and their safe use will be passed down by chemical manufacturers and importers through Safety Data Sheets. The marketing or use of substances of very high concern to health or the environment, regardless of their volume, must be authorised by the ECHA. This applies to substances that are: carcinogenic; mutagenic; toxic to reproduction; persistent, bio-accumulative and toxic; and very persistent/very bio-accumulative. The ECHA acts as the central point for REACH, and manages the databases necessary to operate the system, co-ordinates the evaluation of suspicious chemicals and runs a public database in which consumers and professionals can find hazard information. The Regulations call for progressive substitution of the most dangerous chemicals when suitable alternatives are identified. A June 2017 amendment added 12 new substances to Annex 14, which sets out the list of substances that are subject to authorisation. The 2019 REACH Amendment Regulations come into force on exit day as defined in the European Union (Withdrawal) Act 2018. They make amendments to ensure the UK has an effective system of chemicals regulation after leaving the EU. Once the UK leaves the EU it will require its own domestic controls on chemical regulation. These Regulations therefore amend the retained direct EU Regulation (EC) 1907/2006 so that the REACH provisions can work effectively within the UK to provide a UK system of chemicals regulation after exiting the EU. This system will be similar to the current EU system under Regulation (EC) 1907/2006. No data, no market was the key principle to Regulation (EC) 1907/2006, and this will continue in the new UK system. The functions undertaken by the ECHA under Regulation (EC) 1907/2006 are transferred to domestic bodies, predominantly the HSE, who already have some functions under REACH as the UK's competent authority. Any duties relating to appeals under REACH will be heard by the first-tier tribunal instead of the ECHA Board of Appeal. There are transitional provisions to allow industry to move to the new UK system and reduce disruption. UK companies will be able to continue to undertake the same activities in relation to chemicals as they did prior to the UK leaving the EU, however they will need to provide the HSE with some information in order to do so.		Applies to the site as an end-user of chemicals.	Quality & Food Safety Manager	ECHA Registration
7.3	Batteries and Accumulators (Placing on the Market) Regulations 2008 (SI 2008/2164)	Secretary of State	These Regulations state that new batteries and accumulators (or appliances containing them) must not contain certain levels of heavy metals and establish additional labelling and recycling provisions. It is prohibited to market a battery or accumulator containing more than 0.0005% of mercury; or 0.002% of cadmium, with exemptions for button cells, emergency and alarm systems, medical equipment and cordless power tools. All batteries and accumulators and battery packs must be labelled with the crossed out wheeled bin symbol to show that they are not permitted for disposal as general waste. In addition, button cells and batteries and accumulators containing permitted quantities of mercury, cadmium and lead must contain the relevant chemical symbol. All appliances which incorporate batteries and accumulators must be designed in a way so they can be easily removed, and accompanied by instructions on how to do so. The Secretary of State enforces the Regulations and has the power to require the production of documents and information, and to obtain evidence if it is believed that batteries and accumulators are not complying with the provisions. Failure to comply can lead to a compliance notice being served which states the required actions, which if not complied with, can lead to the serving of an enforcement notice and prosecution.		Applies to the site as an end-user of batteries.	WWTP Manager	Purchasing Records

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
7.4	European Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances Regulation (EU) 2019/521 (OJ:L86/1/2019) amending, for the purposes of its adaptation to technical and scientific progress Regulation (EC) on classification, labelling and packaging of substances and mixtures		The EU Regulation on the classification, labelling and packaging of substances and mixtures, which is known as 'the CLP Regulation' or 'CLP' adopts the United Nations' Globally Harmonised System on the classification and labelling of hazardous chemicals (GHS) across all European Union countries, including the UK. CLP requires companies to classify, label and package their hazardous chemicals appropriately before placing them on the market. The classification and labelling of hazardous chemicals is based on the Globally Harmonised System, which aims to ensure a high level of protection of health and the environment, as well as the free movement of substances, mixtures and articles. The obligations under CLP are similar to the previous EU legislation; however, there are some important differences. An enormous number of products must be re-labelled to comply with CLP, including consumer items such as paints or detergents, as well as industrial mixtures. This Regulation was further amended in June 2017 by making changes to Annex 6 which specifies harmonised classification and labelling for certain substances. The changes made revisions to the introductory paragraphs and special rules for packaging. Regulation (EC) 1272/2008, harmonises the provisions and criteria for the classification, labelling and packaging of substances and mixtures and certain specific articles within the Union and takes into account the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) of the United Nations (UN). The 2019 amendment aligns the EU Regulations with the results of the UN's periodic review of the classification criteria and labelling rules of the GHS. The sixth and seventh revisions of the GHS result from changes adopted in 2014 and 2016 by the UN's Committee of Experts on the Transport of Dangerous Goods and on the GHS. These revised editions of the GHS made adaptations including: · introduction of a new hazard class for desensitised explosives and a new hazard category, pyrophoric gases, within the hazard class flammable gases; · changes to the criteria for substances and mixtures which in contact with water emit flammable gases, the generic cut-off values; · changes to the general provisions to classify aerosol forms of mixtures; · changes to the definitions and classification criteria for various hazard classes; and · amendments to some hazard and precautionary statements.	Guidance is available at: https://osha.europa.eu/en/file/40573/ The HSE has published guidance on what to do in the event of a no deal Brexit: https://www.hse.gov.uk/brexit/brexit-no-deal-guidance.htm.	Likely to apply to the transportation of product although third party hauliers would be responsible	Logistics Manager	Product Delivery Records
7.5	Control of Major Accident Hazard Regulations 2015 (SI 2015/483)	HSE	These Regulations aim to prevent major accidents and limit their consequences to people and the environment by requiring the preparation of a Major Accident Prevention Policy (MAPP), safety reports and internal/external emergency plans. For both lower and upper tier sites, a MAPP must be prepared which includes sufficient details to demonstrate that the operator has a suitable safety management system in place. Schedule 1 to the Regulations lists the dangerous substances and qualifying quantities for both lower and upper tier sites. Before construction of an establishment begins, the operator must send particular details to the competent authority including details of the dangerous substance present. Any changes to the information must be notified immediately. For top tier sites where dangerous substances are present in high quantities, a safety report must be compiled and sent to the competent authority before construction begins. In addition, an on-site emergency plan must be prepared for top tier sites. Local authorities are responsible for the preparation of off-site emergency plans. Emergency plans must be reviewed and tested at least every three years. It is the responsibility of the person who has prepared the emergency plan to implement it when a major accident occurs. MAPPs and safety reports must be reviewed every five years. The public must be informed of safety measures at the establishment, including details of what to do in case of a major accident.		The site is not a COMAH site although Schedule 1 should be checked occasionally for any relevance to the site's operations.	Health & Safety Manager	Risk assessments MAPP On-site emergency plan (for top tier sites) Safety plan (for top tier sites)
7.6	Control of Substances Hazardous to Health Regulations 2002 (SI 2002/2677) EH40/2005 Workplace Exposure Limits	Health and Safety Executive	The COSHH Regulations aim to control exposure to hazardous substances by requiring employers to carry out risk assessments prior to work commencing, to prevent or control exposure to hazardous substances and to monitor employees' exposure. Certain hazardous substances are prohibited and employers with 5 or more employees must record the significant risk assessment findings. Employers must prevent exposure to hazardous substances by replacing them with a less hazardous substance, and where this is not possible, must control exposure through protective measures such as suitable work systems and equipment; ventilation systems; and personal protective equipment. Control measures must be maintained,	The occupational exposure limits were revised in August 2018 and are provided within the HSE's EH40/2005 Workplace Exposure Limits guidance.	The site must keep a COSHH register, carry out risk assessments for exposure to hazardous substances and provide adequate precautions to protect employees.	Health & Safety Manager	COSHH risk assessments COSHH Register Material safety data sheets

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
			examined and tested on a regular basis with records kept and employers must monitor employees' exposure to hazardous substances and keep records. Health surveillance is required where employees are exposed or likely to be exposed to hazardous substances. Employers must provide employees with information, instruction and training on the substances they are likely to be exposed to, including the risks they pose and the precautions they can take to protect themselves. They must also make sure that accident and emergency procedures are prepared, which should include safety drills and the provision of first-aid facilities. There are also specific provisions for fumigations. The 2019 amendment D91				Occupational exposure records
7.7	Control of Pesticides Regulations 1986 (SI 1986/1510)	Defra	The Regulations control the use of pesticides in order to protect people and the environment. They do this by laying down requirements for the advertising, sale, supply, use and storage of pesticides. It is prohibited to advertise, sell, supply, use or store pesticides unless Ministers have given their approval. That approval can be experimental, provisional, or full. If the Regulations have been contravened, Ministers have the power to seize or dispose of the pesticide. Employers must ensure that employees who sell, supply, store or use pesticides are properly trained to comply with the Regulations. People who sell, supply, store or use pesticides must take precautions to protect the health of humans, animals and plants, and to safeguard the environment.		Requires use of approved pesticides and protection of workers from health effects of exposure.	Health & Safety Manager	Risk assessments Pesticide application records
7.8	Plant Protection Products (Sustainable Use) Regulations 2012 (SI 2012/1657) Plant Protection Products Regulations 2011 (SI 2011/2131) Plant Protection Products (Fees and Charges) Regulations 2011 (SI 2011/2132) Pesticides and Fertilisers (Miscellaneous Amendments) (EU Exit) Regulations SI 2019/306	Defra	These Regulations deal with the sustainable use of pesticides, including the requirement for the UK to adopt a National Action Plan (NAP) and provisions to achieve the sustainable use of pesticides by reducing risks and their impacts on human health and the environment. The EU regime for plant protection products has become increasingly harmonised over the years. Under the Thematic Strategy for Pesticides three recent key pieces of legislation have taken this process forward: • Regulation (EC) 1107/2009, on the placing of plant protection products on the market; • Regulation (EC) 396/2005, on maximum residue levels of pesticides in or on food and feed of plant and animal origin; and • Directive 2009/128/EC, which controls the use of plant protection products. The Plant Protection Products (Fees and Charges) Regulations SI 2011/2132 set fees and charges to recover the Government's costs of implementing the legislation whilst the Plant Protection Products Regulations SI 2011/2131 support the enforcement of Regulation (EC) 1107/2009. These implement Directive 2009/128/EC and apply to all pesticides that are plant protection products, including those to protect plants from pests and diseases in agriculture, the amenity sector and domestic gardens. In future, the Directive will be extended to cover biocidal products (e.g. non-agricultural pesticides, disinfectants and preservatives). Distributors who sell plant protection products to people other than professional users must provide general information on the risks to human health and the environment of their use. Anyone who uses a plant protection product must ensure that: • Precautions are taken to protect human health and the environment; • Their application is confined to the crop, land, produce, buildings, contents or buildings, materials or other areas intended to be treated; and • When they are used in any of the following places, the amount used and the frequency of use is kept as low as possible: o Areas used by the general public or by vulnerable groups, o Areas near healthcare facilities, o Protected areas, o Areas recently treated with a plant protection product and used by or accessible to agricultural workers, o Roads, railway lines, very permeable surfaces, or other infrastructure close to surface water or groundwater, or o Sealed surfaces with a high risk of run-off into surface water or sewage systems. Where the use of a plant protection product represents a risk to the aquatic environment or drinking water and there is a particular product authorised for use in such a situation which is not classified as dangerous for the aquatic environment or does not contain priority hazardous substances, then that product should be used.	A Code of Practice for the use of plant protection products is available via the following link: Code_of_Practice_for_using_Plant_Protection_Products_-_Complete20Code.pdf	Sedamyl UK must ensure that any pesticides used at the site are purchased, stored, used and disposed of in accordance with the Regulations (see Code of Practice). Also, must ensure that pesticide residues are not too high in raw materials processed by the site.	WWTP Manager	Risk assessments Pesticide application records

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
			Anyone who stores plant protection products for professional use must make sure that they are stored in areas constructed in a manner that prevents their unwanted release. Plant protection products must be used in compliance with the conditions specified in the product's authorisation, which must be specified on the labelling. Plant protection products and adjuvants that may be mistaken for food, drink or feed must be packaged so as to minimise the likelihood of such a mistake being made. Plant protection products and adjuvants available to the general public that may be mistaken for food, drink or feed must contain components to discourage or prevent consumption. The 2019 Amendment Regulations make amendments to legislation in the area of plant protection, so that it can continue to operate effectively after the UK leaves the EU.				

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
7.9	Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009/1348)		The aim of the Regulations is to impose various requirements and prohibitions on the carriage of dangerous goods by road (as well as rail and inland waterway) and the use of transportable pressure equipment. Various provisions are established for those carrying dangerous goods in order to meet the requirements of ADR, with regard to: • Carriage to be in accordance with ADR; • Alternative placarding requirements to apply to certain national carriage; • Additional security requirements for carriage by road; • Additional security requirements relating to access; • Application of ADR to certain carriages by private individuals. ADR is a European Agreement on the International Carriage of Dangerous Goods by Road dating from 1957. The acronym derives from the original French title: 'Accord Européen Relatif au Transport International des Marchandises Dangereuses Par Route'. Schedule 1, Part 1 on carriage by road includes provisions on: • Replacing Hazard Identification Numbers with Emergency Action Codes; • Displaying the orange-coloured plate, if more than one type of dangerous good is carried; • Displaying a telephone number to obtain specialist advice; • Using hazard warning panels.		Relevant to the transport of alcohol by road tanker from the distillery, which is carried out by third party contractors. Training of drivers is the responsibility of the transport contractor and documentation etc. is the responsibility of the Health & Safety Manager.	Logistics Manager	Transportation records Risk assessments
7.10	Control of Asbestos Regulations SI 2012/632	Health and Safety Executive	The Regulations aim to protect workers and those who may become exposed to asbestos fibres following work with materials containing asbestos. Anyone who has a duty with regard to non-domestic premises must carry out a risk assessment to determine whether asbestos is present in the premises as well as any work which may expose employees to asbestos. If asbestos is present, a written plan must be produced which outlines the control measures to be taken to monitor and reduce risk. Before work with asbestos can be carried out, a plan of work must be produced including details on the nature and length of the work, measures taken to prevent or reduce exposure, and safety equipment to be used. All licensable work (i.e. higher risk) carried out with asbestos must be subject to a licence granted by the HSE. The enforcing authority must be notified 14 days before any such work can begin. Non-licensable work (lower risk) just needs to be notified before the work begins. Further provisions are also established with regard to: • Information, instruction and training; • Preventing or reducing exposure to asbestos; • Control measures; • Provision and cleaning of protective clothing; • Accidents, incidents and emergencies; • Preventing or reducing the spread of asbestos; • Premises and plant cleanliness; • Designated areas; • Air monitoring and air testing and site clearance; • Health records and medical surveillance; • Washing facilities; and • Storage, distribution and labelling of raw asbestos and asbestos waste. In addition, various prohibitions are outlined relating to asbestos spraying, or work involving insulating or soundproofing materials containing asbestos; and labelling of products containing asbestos.		Requires Sedamyl UK to identify any asbestos at the premises and take measures to protect employees, contractors, visitors and the general public from exposure	Health & Safety Manager	Asbestos risk assessments Asbestos management plan

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
7.11	The Notification of Cooling Towers and Evaporative Condensers Regulations 1992 (SI 1992/2225)	Local Authority	Sets out the requirement to ensure that the local authority is informed that there is a cooling tower on site. Any changes to the cooling tower, or upon de-commissioning, must be notified in writing to the local authority. Also requires the prevention of risk from legionella bacteria in water systems through effective control of such systems e.g. recirculation of water, use of chemicals, temperature control, etc.		Requires notification to Selby District Council of any cooling towers on site and control of water systems to prevent the formation and spread of legionella bacteria.	Health & Safety Manager	Legionella risk assessments Monitoring records Records of approval from Selby District Council
7.12	Dangerous Substances (Notification and Marking of Sites) Regulations 1990 (SI 1990/304)	HSE Fire Authority	These Regulations require notification to the local fire authority and the HSE for any site with a total quantity of 25 tonnes or more of 'dangerous substances'. They also require the display of signs warning of the presence or possible presence of dangerous substances at the access points to any site with a total quantity of 25 tonnes or more of dangerous substances, whether or not the site is excepted from the notification requirements; and allow an inspector to direct the display of signs at locations of dangerous substances at such a site, if necessary.		Likely to apply to alcohol as a flammable liquid, so requires notification to the HSE and Fire Authority and marking of the site to warn of the presence of dangerous substances.	Health & Safety Manager	Risk assessments Monitoring records Records of approval from the HSE and Fire Authority
7.13	Dangerous Substances and Explosive Atmospheres Regulations 2002 (SI 2002/2776)	HSE Fire Authority	These Regulations require employers to determine what dangerous substances are in their workplace and the associated fire and explosion risks, and put control measures in place to either remove those risks or, where this is not possible, control them. In addition, they must: • Put controls in place to reduce the effects of any incidents involving dangerous substances; • Prepare plans and procedures to deal with accidents, incidents and emergencies involving dangerous substances; • Ensure employees are properly informed about, and trained to control or deal with, the risks from dangerous substances; and • Identify and classify areas of the workplace where explosive atmospheres may occur and avoid ignition sources (from unprotected equipment, for example) in those areas.		Requires protection of employees, contractors and other site visitors against explosion risks related to dangerous substances at the site.	Technical Department	Risk Assessment

Notable forthcoming legislation

Environment Bill

The Government has published a landmark Environment Bill, to tackle the biggest environmental priorities and signal a historic step change in the way the natural environment is protected and enhanced. It will ensure the UK maintains and improves its environmental protections as it leaves the EU, and build on the strong UK track record. Environmental principles will be enshrined in law and measures introduced to improve air and water quality, tackle plastic pollution and restore habitats so plants and wildlife can thrive. It allows for legislation which will create legally-binding environmental improvement targets, and will establish a new independent Office for Environmental Protection in Bristol to: scrutinise environmental policy and law; investigate complaints; and take enforcement action against public authorities to uphold environmental standards. While the Bill applies to England only, more than half of its measures, such as those designed to drive up recycling rates, will apply across the UK, with the consent of devolved administrations. The Bill will: ensure the environment is at the heart of all Government policy making, and that this and future Governments are held to account if they fail to uphold their environmental duties, including: becoming net-zero greenhouse gas emitters by 2050, long-term legally binding targets on biodiversity, air quality, water and resource and waste efficiency; improve air quality by: setting a legally binding target to reduce PM2.5, increasing local powers to address sources of air pollution and work with families to promote cleaner fuels for burning, mandating manufacturers to recall vehicles which do not meet environmental standards; restore and enhance nature, through: making sure new houses are built in a way which protects and enhances nature and delivers thriving natural space for local communities, improving protection for natural habitats by supporting a Nature Recovery Network and establishing Local Nature Recovery Strategies; transform the way waste is managed, by: making sure producers take responsibility for the waste they create, introducing a consistent approach to recycling, tackling waste crime, introducing bottle deposit return schemes, improving litter enforcement, introducing new charges to minimise the use and impact of single use plastics; protect water resources, by: increasing sustainable water management through securing long-term, resilient water and wastewater services, directing water companies to work together to meet current and future demand for water. By setting legally-binding environmental targets, the UK can show global environmental leadership at a crucial time for the planet. Environmental principles will be embedded in decision making, and with an obligation to publish environmental improvement plans, such measures will help to protect and improve the environment.
Improving the air we breathe: Poor air quality is the greatest environmental risk to our health. Even though UK air is the cleanest since the industrial revolution, there is work to be done. The Bill will build on the Clean Air Strategy and highlights the drive to clean up UK air. Through a legally-binding target, emissions of particulate matter pollutants with the biggest impacts on human health will be limited. This target is one of the most ambitious in the world, and could improve the quality of millions of people's lives. Such measures will drive change at a local level and improve co-operation between local authorities who have a legal responsibility for local air quality. The aim is to improve the outdated Clean Air Act 1993. Finally, a new power will force vehicle manufacturers to recall vehicles for environmental non-conformity or failure, in the case that a manufacturer refuses to issue a voluntary recall.

Restoring and enhancing nature and green spaces: With nature in decline, no measures have been introduced that have been able to reverse the downward trend and drive the necessary change. The Bill will deliver a step-change in the ambition to restore and enhance the natural environment, introducing measures to require and support lasting action for nature. Through work with the Ministry of Housing, Communities and Local Government, biodiversity net gain will help to deliver the necessary increases in housing that are needed, whilst enhancing nature. An amended duty on public authorities around biodiversity will make sure that every level of Government is playing its part.
Resources and waste management: The Bill signals a radical step in how waste will be dealt with, with serious measures on tackling plastics and pollution. Such measures will extend responsibility for waste disposal to those who produce it, reducing waste in the long-term as well as creating incentives for material reuse and moving towards a circular economy. There will be a crackdown on litter and how it blights local communities, whilst tackling organised gangs who profit from waste crime.
Delivering sustainable water resources: The Bill aims to deliver on the pledges in the 25 Year Environment Plan, to make sure everyone has access to a clean and plentiful supply of water. Through improving long-term water management, including increasing co-operation across water company boundaries, the challenges of climate change can be met. Measures will be introduced to prevent the environmentally damaging removal of water, in a bid to protect this precious natural asset.

Food & Feed Safety

Animal Feed

Ref.	Legislation	EU	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
1.1	The Animal Feed (Composition, Marketing and Use) (England) Regulations 2015 SI 2015/255	Regulation (EC) 767/2009 on the marketing and use of feed. Directive 2008/38/EC establishing a list of intended uses of animal feeding stuffs for particular nutritional purposes. Regulation (EC) 1829/2003 on genetically modified food and feed. Regulation (EC) No 1831/2003 on additives for use in animal nutrition. Regulation (EC) No 178/2002 laying down the general principles and requirements of food law. Directive 2002/32/EC on undesirable substances in animal feed.	These Regulations— (a)provide for the continuing enforcement or implementation of EU Regulations and Directives on feed safety, genetically modified feed, feed additives, the marketing and use of feed, undesirable substances (contaminants) in feed and feed for particular nutritional purposes; (b)provide for ambulatory references to the EU instruments specified in regulation 2(3); (c)prescribe offences and penalties for failure to comply with the Regulations; (d)revoke or make consequential amendments to certain Regulations.	http://www.food.gov.uk/business-industry/farmingfood/animalfeed/animalfe edlegislation/ http://food.gov.uk/policy-advice/gm/gm_labelling	To comply with this regulations, Sedamyl UK needs to label feed stuffs accurately. Use of GMO and additives is authorised. In order to achieve the general objective of a high level of protection of human health and life, the company shall conduct risk assessments and adapt measures to achieve the high level of health protection, if necessary. The company has traceability system in place to comply with Food Safety requirements.	Quality & Food Safety Manager	x
1.2	The Animal Feed (Hygiene, Sampling etc. and Enforcement) (England) Regulations 2015 SI 2015/454	Regulation (EC) 152/2009 laying down the methods of sampling and analysis for the official control of feed Regulation (EC) 183/2005 laying down requirements for feed hygiene, ("Regulation 183/2005").	These Regulations, provide for the continuing execution and enforcement of Regulation (EC) No 183/2005 laying down requirements for feed hygiene, ("Regulation 183/2005") and Commission Regulation (EC) No. 152/2009 laying down the methods of sampling and analysis for the official control of feed, ("Regulation 152/2009"), and also make provision as to administration generally in relation to feed law, in particular so as to give effect to Regulation (EC) No 882/2004 on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules, ("Regulation 882/2004)		To comply with this regulations, Sedamyl UK uses accredited laboratories for testing. Sedamyl UK complies with legal requirements to high level of food hygiene by implementing HACCP system and GMP.	Laboratory Manager All	x
1.3	The Feed (Sampling and Analysis and Specified Undesirable Substances) (England) Regulations 2010 SI 2010/2280		Makes amendments to the Agriculture Act 1970 (The other provisions of this SI have been revoked) The provisions on undesirable substances were revoked by Schedule 2 to the Animal Feed (England) Regulations 2010 2010/2503 and parallel legislation in the devolved administrations 2010/355 (NI) S.I. 2010/2652 (W.220) S.I. 2015/454		To comply with this regulations, Sedamyl UK uses accredited laboratories for testing of undesirable substances.	Laboratory Manager	Test results
1.4	The Animal Feed (England) Regulations 2010 SI 2010/2503		Makes amendments to the Agriculture Act 1970 (The other provisions of this SI have been revoked) SI 2013 No, 3133 SI 2013/3207 (W.317) 2013/294 (NI) SI 2015 No 255		Sedamyl UK makes sure that animal feed produced on site is safe for animals.	Quality & Food Safety Manager	Test results
1.5	Codex Alimentarius		CXA 4-1989 Classification of Foods and Animal Feeds CXC 45-1997 Code of Practice for the Reduction of Aflatoxin B1 in Raw Materials and Supplemental Feedingstuffs for Milk-Producing Animals CXC 54-2004 Code of Practice on Good Animal Feeding	https://beta.companieshouse.gov.uk/company/07023586	Sedamyl UK is registered business for animal feed.	Sedamyl UK	

Commented [HM1]: SED QP-001 Non-conforming product
SED QP-004 Product recall
SED QP-006 Product testing
SED QP-007 Raw material testing
SED QP-010 Traceability
SED QP-027 Food Defence

Permits, Authorisations etc.

Commented [HM2]: Test results

SED QP-009 Glass and brittle plastic
SED QP-011 GMP
SED QP-021 Pest Control
SED QP-022 Cleaning procedure
SED QP-030 HACCP

Permits, Authorisations etc.

Food additives

Ref.	Legislation	EU	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
2.1	The Food Additives, Flavourings, Enzymes and Extraction Solvents (England) Regulations 2013 SI 2013/2210	Enzymes Regulation (EU) 1056/2012 amending Regulation (EC) No 1332/2008 on food enzymes Commission Implementing Regulation (EU) No 562/2012 amending Commission Regulation (EU) 234/2011 with regard to specific data required for risk assessment of food enzymes. Regulation (EC) 1332/2008 on food enzymes and amending Council Directive 83/417/EEC, Council Regulation, 1493/1999/EC, Directive 2000/13/EC Council Directive 2001/112/EC and Regulation 258/97/EC. (as amended) Extraction Solvents Directive 2009/32/EC on the approximation of the laws of the Member States on extraction solvents used in the production of foodstuffs (as amended) Food Additives Regulation (EC) No. 1333/2008 of the European Parliament and of the Council on food additives Commission Regulation (EU) 231/2012 laying down specifications for food additives listed in Annexes II and III to Regulation (EC). 1333/2008 Consolidated versions (including all amendments) of the above two pieces of legislation can be accessed by clicking here.	Provides for the executive and enforcement of EU Regulations on food additives, flavourings (including smoke flavourings) and enzymes. Transposes the extraction solvent requirements (Directive 2009/32/EC). The 2013 Regulations revoke and replace all food additive type legislation.	http://www.food.gov.uk/business-industry/guidancenotes/additives-supps- guidance/foodadlegguid			

Food contaminants

Ref.	Legislation	EU	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
3.1	The Contaminants in Food (England) Regulations 2013 SI 2013/2196	Council Regulation (EEC) 315/93 laying down procedures for contaminants in food. Commission Regulation (EC) No 1881/2006 as amended setting maximum levels for certain contaminants in foodstuffs. This includes 27 amendments and the above link is to the latest consolidated version. Commission Regulation (EC) 124/2009 setting maximum levels for the presence of coccidiostats or histomonostats in food resulting from the unavoidable carry-over of these substances in non-target feed. Commission Regulation 401/2006 laying down sampling and analysis methods for official control of levels of mycotoxins in foodstuffs. Commission Regulation 1882/2006 laying down sampling and analysis methods for official control of nitrates levels in certain foodstuffs. Commission Regulation (EC) 333/2007 as amended laying down sampling and analysis methods for official control of levels of lead, cadmium, mercury, inorganic tin, 3- MCPD and benzo(a)pyrene in foodstuffs. Commission Regulation (EC) 2017/644 laying down methods of sampling and analysis for the control of levels of dioxins, dioxin- like PCBs and non-dioxin-like PCBs in certain foodstuffs	Provides for the execution and enforcement of Regulation (EC) No. 1882/2006 as amended	http://www.food.gov.uk/multimedia/pdfs/g uidancecif09.pdf Sampling and Analysis for Official Controls: Sampling_analysis	Sedamyl UK provides concentration of its products. Products are labelled accordingly. All contaminants are tested by accredited laboratory.	Laboratory Manager	Alcohol testing samples Contaminants test results

Food contact materials

Ref.	Legislation	EU	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
4.1	The Materials and Articles in Contact with Food (England) Regulations 2012 SI 2012/2619	Commission Regulation (EU) 10/2011 plastic materials and articles intended to come into contact with food, as amended (link is an unofficial consolidated version) Commission Regulation (EC) 450/2009 on active and intelligent materials and articles intended to come into contact with food Regulation (EC) 282/2008 on recycled plastics (enforcement provisions not yet implemented) Commission Directive (EC) 2007/42/EC on materials and articles made of regenerated cellulose film Commission Regulation (EC) 2023/2006 on good manufacturing practice for materials and articles intended to come into contact with foods, as amended (link is an unofficial consolidated version) Regulation (EC) 1895/2005 on the restriction of certain epoxy derivatives in materials and articles intended to come into contact with food Council Directive 84/500/EEC on the approximation of the laws of the Member states relating to ceramic articles intended to come into contact with foodstuffs Commission Regulation (EC) 1935/2004 on materials and articles intended to come into contact with food Council Directive 78/142/EEC relating to the use of vinyl chloride monomer (VCM)	Provides for the execution and enforcement in England of the provisions of Commission Regulation (EU) 10/2011 on plastic materials and articles intended to come into contact with food. Also revokes and re- enacts all existing national measures, with the exception of the Plastic Kitchenware (Conditions on Import from China) (England) Regulations 2011.	Legal Compliance Food Packaging About the regulations	All materials coming into contact with food used for production, packaging, storage and transportation of our products are the food grade.		

Food imports

Ref.	Legislation	EU	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
5.1	The Plastic Kitchenware (Conditions on Imports from China) (England) Regulations 2011 SI 2011/1517	Commission Regulation (EU) 284/2011 ("the EU Kitchenware Regulation") Its full title is Commission Regulation (EU) 284/2011 laying down specific conditions and detailed procedures for the import of polyamide and melamine plastic kitchenware originating in or consigned from the People's Republic of China and Hong Kong Special Administrative Region, China.	Provides for the execution and enforcement in relation to England of Regulation (EU) No. 284/2011, which lays down specific conditions and detailed procedures for the import of polyamide and melamine plastic kitchenware originating in or consigned from China and Hong Kong		N/A?		
5.2	Chernobyl Third Country Imports regulations	Regulation (EC) 733/2008 (repealed Council Regulation 737/90); Commission Regulation 1661/1999; Council Regulation (Euratom) No. 3954/87; Regulation EC/1609/2000	Governs imports of specified foods originating in third countries following the Chernobyl accident in 1986.				
5.3	The Specified Products from China (Restriction on First Placing on the Market) (England) Regulations 2008 SI 2008/1079	Commission Decision 2008/289/EC on emergency measures regarding the unauthorised genetically modified organism "Bt 63" in rice and rice products originating in, or consigned from, China.	Provides for the execution and enforcement of Commission Decision 2008/289/EC regarding the unauthorised genetically modified organism 'Bt 63' in rice and rice products originating in, or consigned from China.		N/A?		
5.4	Special conditions governing the import of feed and food originating in or consigned from Japan following the accident at the Fukushima nuclear power station Regulation (EU) 2016/6	Regulation (EU) 2016/6 Regulation (EU) 2017/2058	Governs imports of specified foods originating in Japan following the Fukushima nuclear accident in 2011.	https://www.food.gov.uk/business-industry/imports/banned_restricted/japan	N/A?		

Food irradiation

Ref.	Legislation	EU	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
6.1	Food Irradiation (England) Regulations 2009 2009/1584	Directive 1999/2/EC concerning foods and food ingredients treated with ionising radiation. Directive 1999/3/EC listing foods and food ingredients that may be treated with ionising radiation. Commission Decision 2002/840/EC adopting the list of approved facilities in third countries for the irradiation of foods Commission List of approved facilities for the treatment of foods and food ingredients with ionising radiation in the Member States Commission Decision 2004/691/EC amending Decision 2002/840/EC adopting the list of approved facilities in third countries for the irradiation of food. Commission Decision 2007/802/EC amending Decision 2002/840/EC as regards the list of approved facilities in third countries for the irradiation of foods. Commission Decision 2010/172/EU amending Decision 2002/840/EC as regards the list of approved facilities in third countries for the irradiation of foods.	Implements Directive 1999/2/EC concerning foods and food ingredients treated with ionising radiation, Directive 1999/3/EC listing foods and food ingredients that may be treated with ionising radiation, Commission Decision 2002/840/EC adopting the list of approved facilities in third countries for the Irradiation of foods, Commission List of approved facilities for the treatment of foods and food ingredients with ionising radiation in the Member States Commission Decision 2004/691/EC amending Decision 2002/840/EC adopting the list of approved facilities in third countries for the irradiation of food and Commission Decision 2007/802/EC amending Decision 2002/840/EC as regards the list of approved facilities in third countries for the irradiation of foods	http://www.food.gov.uk/multimedia/pdfs/l egcontamfood.pdf	N/A?		

Food labelling

Ref.	Legislation	EU	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
7.1	Food Information Regulation 2014 (SI 2014 No.1855) [DEFRA has responsibility for this legislation in England]	Regulation EU No. 1169/2011 on the provision of food information to consumers. Commission Delegated Regulation (EU) No.78/2014 amends Annex II of EU Food information to Consumers listing the 14 allergens	These Regulations bring together general labelling, nutrition and allergen labelling into a single piece of legislation. This provides for enforcement of EU Regulation 1169/2011 on provision of food information to consumers The 2016 Regulations have amended the 2014 Regulations in Wales and NI	Allergen Label Guidance	All products are labelled accordingly, including contamination of allergens and other relevant information.		
7.2	Bread and Flour legislation 1988/141 [DEFRA has responsibility for this legislation in England]		Requires bread and flour, to meet certain criteria in their composition.				
7.3	Food (Lot Marking) legislation [DEFRA has responsibility for this legislation in England]	Directive 89/396/EEC. The new Regulations continue the requirements that food produced prepared or packaged as part of a lot is marked or labelled as to enable the lot to be identified.	Requires a food forming part of a lot to be clearly indicated.		(Lot marking)		

Food Safety & Hygiene

Ref.	Legislation	EU	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
8.1	Food Safety and Hygiene (England) Regulations 2013 2013/2996	Regulation (EC) 178/2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety. Implemented by: Regulation (EU) 931/2011 - on the traceability requirements set by Regulation (EC) 178/2002 for food of animal origin and Regulation (EC) 16/2011 in regard to RASFF. Regulation (EC) 852/2004 on the hygiene of foodstuffs. (as amended). Regulation (EC) No 1666/2006 - amends Regulation (EC) No 2076/2005 laying down transitional arrangements for the implementation of Regulations (EC) No 853/2004, (EC) No 854/2004 and 882/2004/EC Regulation (EC) 1021/2008 – amends Annexes I, II and III of Regulation (EC) 854/2004 and Regulation (EC) 2076/2005 as regards live bivalve molluscs, certain fishery products and staff assisting with official controls in slaughterhouses. Regulation (EC) 2073/2005 on microbiological criteria for foodstuffs (as amended) Regulation (EC) 2076/2005 laying down transitional arrangements. (as amended)	Enforces and executes Regulation (EC) 178/2002 and the EU food hygiene Regulations Provides national rules for: • Temperature control at retail		(Food and feed safety controls, HACCP, CCP, traceability, product recall etc., crisis management, food hygiene measures: microbiological, temperature control, sampling and analysis, import/export, contamination preventive measures and control, measures to protect animal health and environment, cleaning and maintenance, use of clean water, Pest Control, staff trainings, prevent spread of diseases, record-keeping, transport, equipment coming to contact with food, food waste, personal hygiene, wrapping and packaging)		
8.2	Food Safety Act 1990 (C.16)		Provides the framework for all domestic food legislation and provides powers to make secondary legislation to implement EU food Laws	f sactguide	(Food safety, consumer protection, food information)		

Genetically modified food

Ref.	Legislation	EU	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
9.1	Genetically Modified Food (England) Regulations 2004 2004/2335	Commission Regulation (EC) No. 1829/2003 on genetically modified food and feed. Separate Regulations make provision for the enforcement of that part of Regulation (EC) No. 1829/2003 relating to feed.	Provides for the execution and enforcement of certain specified provisions (i.e. those relating to food) of Council Regulation (EC) No. 1829/2003 on genetically modified food and feed.	Links to general guidance including 1829/2003 and 1830/2003 on GM feed and food	N/A?		

Novel foods

Ref.	Legislation	EU	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
10.1	Novel Foods and Novel Food Ingredients (Fees) Regulations 1997 1997/1336	Regulation (EC) No. 258/97 concerning novel foods and novel food ingredient laying out detailed rules for the authorisation of novel foods, ingredients and processes.	Defines the fees payable on submission of a novel food application to authorities in the UK pursuant to Article 4(1) of Council Regulation (EC) No. 258/97.		N/A		
10.2	Novel Foods and Novel Food Ingredients Regulations 1997 1997/1335	Regulation (EC) No. 258/97 concerning novel foods and novel food ingredient laying out detailed rules for the authorisation of novel foods, ingredients and processes.	Provides for the execution and enforcement of certain specified provisions of Regulation (EC) No. 258/97 concerning novel foods and novel food ingredients.	gmfoods/novel novel/faqs Commission Recommendation 97/618/EC sets out guidance for submission of applications for authorisation.	N/A		

Official control organisation and charging

Ref.	Legislation	EU	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
11.1	Food Safety (Sampling and Qualifications) (England) Regulations 2013 2013/264		Specifies the qualifications necessary to be a public analyst, food analyst or food examiner for the purposes of the Food Safety Act 1990.		Undergo official controls.		
11.2	Official Feed and Food Controls (England) Regulations 2009 2009/3255	Regulation 882/2004/EC on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules as last amended by Commission Regulation 208/2011/EC	Provides for the execution and amendment of Regulation 882/2004 which lays down general rules for the performance of official controls to verify compliance with feed and food controls		Undergo official controls.		
11.3	Food Standards Act 1999 (C.28)		An Act to establish the Food Standards Agency		Undergo official controls.		

Transmissible spongiform encephalopathies (TSEs)

Ref.	Legislation	EU	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
12.1	Transmissible Spongiform Encephalopathies (England) Regulations 2010 2010/801 [Defra has overall policy ownership of these Regulations in England]	Regulation 999/2001/EC laying down rules for the prevention, control and eradication of certain transmissible spongiform encephalopathies as amended. Commission Decision 2009/719/EC amended by Decision 2010/66/EU Commission Decision 2007/411/EC	Administers and enforces EU regulations which lay down rules for the prevention, control and eradication of certain transmissible spongiform encephalopathies (TSEs)		N/A?		

Health & Safety

Fire

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
1.1	Fire Precautions Act 1971						

Hazardous Substances

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
2.1							

Asbestos

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
3.1							

Lifting operations

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
4.1							

Noise

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
5.1							

Personal Protective Equipment (PPE)

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
6.1							

Pressure systems

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
7.1							

Vibrations

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
8.1							

Welfare

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
9.1							

Work Equipment

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
10.1							

Working at Heights

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
11.1							

Young persons

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
12.1							

Legionella

Ref.	Legislation	Regulator	Summary of requirements	Useful link	Actions	Responsible Person	Related authorisation, licenses, consents or records
13.1							

rev.	date
…	…
0	25 May 2016
1	02 May 2017
2	14 June 2018
3	10-Jun-19
4	09-Jan-20
5	10-Jul-20
6	09/09/2020

notes
…
alignment with ISO 14001:2015 standard
set of targets for next 12 months
Targets set for 12 months
Progress review 6 months
Targets set for 12 months
Added Quality and Food Safety for 2019 and 2020

Date of Update	Objective No.	Area(s)	Significant Environmental Aspect	Objective	Environmental Performance Indicator	Action(s)	Action By	Due Date	Status	Date Closed	Comments/Follow up Action
01/07/2019	1	Dry Mill	Nuisance (noise)	Reduce nuisance from noise levels at site/Noise monitoring	Noise related complaints Noise surveys (LAeq)	AM to check E page in log book to be filled monthly. Monthly tick boxes that all measures are in place and good working.	Chris Pyke	15/06/2020	closed	10/07/2020	
01/07/2019	2	Dry Mill	Energy consumption / wheat	Improve the energy efficiency increasing the procution rate with the current plant set up. 50 ton/h wheat within 06/2020	kWh/ton wheat	AM to generally improve the plant efficiency and capacity and follow the Drymill upgrade project	Chris Pyke	15/06/2020	closed	10/07/2020	
11/06/2019	3	Wetmill/Dryers	Air emissions	Reduce likelihood of dust releases and improve control/raise awareness	Law compliance	AM to implement E page in log book and operators to register the average emission values for the month on main chimneys.	Shaun Homes/Andrew Stephenson	15/06/2020	closed	10/07/2020	
11/06/2019	4	Wetmill/Dryers	Discharges to water	Reduce likelihood of chemical/product splillages	Environmental permit breaches	AM to implement E page in log book and operators to carry on bund inspections. Monthly confirm via signature and tick boxes.	Shaun Homes/Andrew Stephenson	15/06/2020	closed	10/07/2020	
11/06/2019	5	Wetmill/Dryers	Nuisance (noise)	Reduce nuisance from noise levels at site/Noise monitoring	Noise related complaints Noise surveys (LAeq)	AM to check E page in log book to be filled with monthly sound monitoring (day and night) recording and reporting to E manager.	Shaun Homes/Andrew Stephenson	15/05/2020	closed	10/07/2020	
11/06/2019	6	Fermentation	Nuisance (noise)	Reduce nuisance from noise levels at site/Noise monitoring	Noise related complaints Noise surveys (LAeq)	AM to check E page in log book to be filled monthly. Monthly tick boxes that all measures are in place and good working order. Monthly pumps change over to set preventative maintenance if needed and identify abnormal noises.	Andrea Rolando	15/06/2020	closed	10/07/2020	
11/06/2019	7	Fermentation/Distillery	Nuisance (odour)	Reduce/Control VOC emissions from Scrubber	Odour related complaints	AM to carry on periodical scrubber wash/weeklyrinse with hot condensate plus monthly caustic CIP wash.	Andrea Rolando	15/06/2020	closed	10/07/2020	
11/06/2019	8	Fermentation/Distillery	Nuisance (odour)	Reduce/Control VOC emissions from Scrubber	Odour related complaints	Implementation of pipeline modification to increase the recycle in the second column	Tech department	31/12/2019	closed	09/01/2020	
27/04/2019	9	IBC chemical storage	Discharges to water	Reduce likelyhood of IBC tipped over because of lack of storage space.	Environmental permit breaches	Technical department to perform evaluation and feasibility of improvements in storage area	Tech department	27/04/2020	open		
27/04/2019	10	Workshop	Discharges to water	Improvement of general condition of drainage system on the back of the workshop area.	Tidiness of the area.	Technical department and Maintenance to improve the drainage system of the area	Tech department	31/08/2019	closed	02/07/2019	
27/04/2019	11	General Site	Nuisance (noise)	Reduce nuisance from noise levels at site/Noise monitoring	Noise related complaints Noise surveys (LAeq)	EM to carry on noise measurements quarterly and focus in on identified noise sources to reduce noise.	Environment Representative	27/04/2020	closed	10/07/2020	
01/01/2019	12	General Site	Use of Energy	Reduce by 4% Gross energy consumption compared to the previous target (1030 kWh/tonwheat)	kWh/ton wheat	Continual improvement into plant performances/yields	Sedamyl Tech. Dept./Operations	31/12/2019	closed	09/01/2020	
01/01/2019	13	General Site	Water consumption	Reduce by 4% water consumption compared to the 2016 average (4.05 m3/tonwheat)	m3/ton wheat	Continual improvement into plant performances/yields	Sedamyl Tech. Dept./Operations	31/12/2019	open		
27/04/2019	14	General Site	Water/Air emissions	No breaches in the next 12 months	Environment Agency CAR	Environmental Management System implementation and daily performance	Operations	27/04/2020	closed	10/07/2020	
11/06/2019	15	General Site	Water/Air emissions	Temperature and Flow breaches avoidance	Environment Agency CAR	Implementation of developed control system on the WWTP in order to avoid peaks that could lead to a breach.	Automation	13/09/2019	closed	06/08/2019	
27/04/2019	16	General Site	Storage of wastes	Improve segregation	Law compliance	AM to perform regular waste audits of site in order to identify opportunities for improvments.	Mick Hartley	27/04/2020	closed	10/07/2020	
01/01/2019	17	General Site	Waste disposal	Reduce the percentage of waste to landfill <18% and recycle>45%	% to landfill, % recycle	Improve and maintain high standard of segregation of wastes in daily operations, awarness	Operations/ Mick Hartley	31/12/2019	closed	09/01/2020	
27/04/2019	18	General Site	Hazardous Waste disposal	Improve segregation of hazardous waste area	Law compliance	Erection of a canopy in skip area dedicated to hazardous waste materials, taking those out from the workshop.	Maintenance	31/12/2019	closed	09/01/2020	

Date of Update	Objective No.	Area(s)	Significant Environmental Aspect	Objective	Environmental Performance Indicator	Action(s)	Action By	Due Date	Status	Date Closed	Comments/Follow up Action
10/07/2020	1	Dry Mill	Nuisance (noise)	Reduce nuisance from noise levels at site/Noise monitoring	Noise related complaints Noise surveys (LAeq)	AM to check E page in log book to be filled monthly. Monthly tick boxes that all measures are in place and good working.	Chris Pyke	09/07/2021	open		
01/07/2019	2	Dry Mill	Energy consumption / wheat	Improve the energy efficiency increasing the procution rate with the current plant set up. 50 ton/h wheat within 12/2020	kWh/ton wheat	AM to generally improve the plant efficiency and capacity and follow the Drymill upgrade project	Chris Pyke	11/01/2021	open		
10/07/2020	3	Wetmill/Dryers	Air emissions	Reduce likelihood of dust releases and improve control/raise awareness	Law compliance	AM to check E page in log book and operators to register the average emission values for the month on main chimneys.	Shaun Homes/Andrew Stephenson	09/07/2021	open		
10//7/20	4	Wetmill/Dryers	Discharges to water	Reduce likelihood of chemical/product splillages	Environmental permit breaches	AM to check E page in log book and operators to carry on bund inspections. Monthly confirm via signature and tick boxes.	Shaun Homes/Andrew Stephenson	09/07/2021	open		
10/07/2020	5	Wetmill/Dryers	Nuisance (noise)	Reduce nuisance from noise levels at site/Noise monitoring	Noise related complaints Noise surveys (LAeq) SED EF-021	AM to check E page in log book to be filled with monthly sound monitoring (day and night) recording and reporting to E manager.	Shaun Homes/Andrew Stephenson	09/07/2021	open		
10/07/2020	6	Fermentation	Nuisance (noise)	Reduce nuisance from noise levels at site/Noise monitoring	Noise related complaints Noise surveys (LAeq) SED EF-021	AM to check E page in log book to be filled monthly. Monthly tick boxes that all measures are in place and good working order. Monthly pumps change over to set preventative maintenance if needed and identify abnormal noises.	Andrea Rolando	09/07/2021	open		
10/07/2020	7	Fermentation/Distillery	Nuisance (odour)	Reduce/Control VOC emissions from Scrubber	Odour related complaints	AM to carry on periodical scrubber wash/weeklyrinse with hot condensate plus monthly caustic CIP wash.	Andrea Rolando	09/07/2021	open		
27/04/2019	8	IBC chemical storage	Discharges to water	Reduce likelyhood of IBC tipped over because of lack of storage space.	Environmental permit breaches	Technical department to perform evaluation and feasibility of improvements in storage area	Tech department	09/07/2021	open		
10/07/2020	9	General Site	Discharges to water	Improvement of general condition of drainage system	Tidiness of the area.	Technical department and Maintenance to improve the drainage system of the area	Tech department	09/07/2021	open		
10/07/2020	10	General Site	Nuisance (noise)	Reduce nuisance from noise levels at site/Noise monitoring	Noise related complaints Noise surveys (LAeq) SED EF-021	EM to carry on noise measurements quarterly and focus in on identified noise sources to reduce noise.	Environmental Manager	09/07/2021	open		
09/01/2020	11	General Site	Use of Energy	Reduce Gross energy consumption to <1000 kWh/ton wheat	kWh/ton wheat SED ER-006	Continual improvement into plant performances/yields	Sedamyl Tech. Dept./Operations	09/07/2021	open		
09/01/2020	12	General Site	Water consumption	Reduce water consumption to <4.05 m3/ton wheat	m3/ton wheat SED ER-006	Continual improvement into plant performances/yields	Sedamyl Tech. Dept./Operations	09/07/2021	open		
10/07/2020	13	General Site	Water/Air emissions	No breaches in the next 12 months	Environment Agency CAR	Environmental Management System implementation and daily performance	Operations	09/07/2021	open		
10/07/2020	14	General Site	Storage of wastes	Improve segregation	Law compliance	Nominated person to perform regular waste audits of site in order to identify opportunities for improvments.	Brendan Lanagahan	11/01/2021	open		
10/07/2020	15	General Site	Waste disposal	Reduce the percentage of waste to landfill <10% and recycle >60%	% to landfill, % recycle SED ER-006	Improve and maintain high standard of segregation of wastes in daily operations, awarness	Operations / Brendan Lanagahan	09/07/2021	open		
10/07/2020	16	Project Area	Hazardous Waste disposal	Improve segregation of hazardous waste area	Law compliance	Create waste storage area for project waste & chemical (bottle storage)	Tech department	31/10/2020	open		
10/07/2020	17	Project Area	Storage of wastes	Improve general condition of area and improve segregation	Law compliance Tidiness of the area SED ER-006 monitoring	Create waste storage area for project waste & chemical (bottle storage)	Tech department	31/10/2020	open		

Date of Update	Objective No.	Area(s)	Objective	Quality Performance Indicator	Action(s)	Action By	Due Date	Status	Date Closed	Comments/Follow up Action
27/05/2020	1	Logistics	Service complaints	%	Quality Manager to monthly monitor complaints received and report to Management	Fissore Fabio	26/05/2021	Open		
27/05/2020	2	Quality	Product quality complaints	%	Quality Manager to monthly monitor complaints received and report to Management	Fissore Fabio	26/05/2021	Open		
27/05/2020	3	Dry Mill	Flour yield	%	Area Manager to improve the plant efficiency and capacity via planned upgrade and daily maintenance.	Pyke Chris	26/05/2021	Open		
27/05/2020	4	Wet Mill	Out of spec. vs. customer spec.	%	Area Manager to monitor and improve plant efficiency to ensure compliance with specifications.	Stephenson Andrew	26/05/2021	Open		
27/05/2020	5	Distillery	No taste rejections	%	Area Manager to monitor and improve plant efficiency to ensure compliance with specifications.	Rolando Andrea	26/05/2021	Open		
27/05/2020	6	Distillery	GNA daily production	hlpa	Area Manager to monitor and improve plant efficiency and capacity to ensure compliance with specifications.	Rolando Andrea	26/05/2021	Open		
27/05/2020	7	Laboratory	Z score in all ring tests		Maintain and continously improve performances of laboratory equipment and laboratory technicians.	Pipitone Manuela	26/05/2021	Open		
27/05/2020	8	Purchasing	Supplier review		Ensure evaluation and revision system is in place for critical suppliers.	Maccagno Ramona	26/05/2021	Open		
27/05/2020	9	Human Resources	Planned training completed	Ok/No	Ensure that trainings are booked and completed in timely manner.	Waldron Janice	26/05/2021	Open		
27/05/2020	10	Maintenance	Preventive maintenance completed	Ok/No	Ensure that all planned maintenance tasks are completed on time.	Lyon Richard	26/05/2021	Open		
18/09/2020	11	Quality	Retain compliance with ISO 9001		Support continious improvement in compliance with ISO standard.	All	17/09/2021	Open		

Date of Update	Objective No.	Area(s)	Objective	Food Safety Performance Indicator	Action(s)	Action By	Due Date	Status	Date Closed	Comments/Follow up Action
27/05/2020	1	Logistics	Complaints due to tanker cleaning	%	Area Manager to ensure that loading operator carries out inspection of each tanker.	Maccagno Ramona	26/05/2021	Open		
27/05/2020	2	Logistics	Passports checked	%	Area Manager to ensure that Gatehouse operator performs passport check for each delivery.	Maccagno Ramona	26/05/2021	Open		
27/05/2020	3	Logistics	POAs correct recording	%	Area Manager to ensure that POA checks are completed and records are kept accordingly.	Maccagno Ramona	26/05/2021	Open		
27/05/2020	4	Dry Mill	POAs correct recording	%	Area Manager to ensure that POA checks are completed and records are kept accordingly.	Pyke Chris	26/05/2021	Open		
27/05/2020	5	Wet Mill	POAs correct recording	%	Area Manager to ensure that POA checks are completed and records are kept accordingly.	Stephenson Andrew	26/05/2021	Open		
27/05/2020	6	Distillery	POAs correct recording	%	Area Manager to ensure that POA checks are completed and records are kept accordingly.	Rolando Andrea	26/05/2021	Open		
27/05/2020	7	Liquid decanting	POAs correct recording	%	Area Manager to ensure that POA checks are completed and records are kept accordingly.	Maccagno Ramona	26/05/2021	Open		
18/09/2020	8	Laboratory	Product contaminance compliance	Legal compliance	Area Manager to regurarly submit product samples to external approved laboratory for analysis.	Pipitone Manuela	17/09/2021	Open		

