Laboratory Test Report
Cork County Council
Waste Water Laboratory
Inniscarra, Co. Cork

October 17,2008

Industry Name Mallow Sewage Works
Address Mallow,
Co. Cork

Industry Code No. 312
Report Ref No. [illegible]
Issued to [illegible]

Licence No. Type S

	Volume	pH	B.O.D.	C.O.D.	Sus Solids	TP-P		TN-N$		Code		Comments
Licence	m3	12.99	mg/l	mg/l	mg/l	mg/l		mg/l				
Limit	999999	3.99	25	125	35	2.0		15				
Date												
~ 07/02/08	4541.	7.0	3.25	22	9			7.8		GS061	G	NH3-N=<0.1mg/l O-PO4=0.2
10/04/08			4.89	26	10	0.64	*	17.1		GS344	C	NH3-N=<0.1mg/L
13/06/08		7.6	5	<21	11	1.61	*	20		GS547	C	
10/07/08			6	29	5	1.3	*	15.4		GS611	C	OPO4-P=1.33mg/L
21/08/08	6591.	7.7	1.1	<21	3	0.94				GS816	C	Amm-N=<0.1 mg/l
% Compl.	100	100	100	100	100	100		25	***			
Average	5566.00	7.43	4.05	15.40	7.60	1.12		15.08	**** **			

The samples are received at the Laboratory on the day of sampling. The above test methods are based on Standard Methods for the examination of Water and Waste Water, 21st Edition 2005, APHA, AWWA, WEF.
C = Composite Sample, G = Grab Sample.
The compliance value may be varied on items marked with an * by the application of uncertainty of measurement values on reverse Page
Chemical Procedure Numbers(CP No.) for INAB accredited tests are as follows:
CP NO. 1 = B.O.D. CP NO. 3 = S.S. CP NO.20 = TP-P
CP NO. 5 = pH CP NO. 6 = C.O.D. CP NO. 7 = Cl CP NO.22=Ammonia(KONELAB)
CP NO.23 = OPO4-P(KONELAB) CP NO.24 = Chloride (KONELAB) CP NO.25=Sulphate(KONELAB)
This report relates only to the samples listed above. This report shall not be reproduced except in full and only with with the approval of the testing laboratory. Cork County Council is not accredited by INAB for tests marked with $.
Kg loadings based on flows as supplied by the company. ~ indicates results that have been edited.

Reported by: [signature] Date: [illegible]

Ms. V. Hannon Technical Manager
Deputy Technical Manager

Wastewater Laboratory Cork County Council- Test Report Addendum

a. Sample date reported in column 1 on this report is the date of collection of the sample from the industry name and address as outlined at the top of the report.
b. Cork County Council wastewater laboratory are not accredited for sample collection.
c. Data reported in (d) below is defined in section 5.10.3 (c) in wastewater laboratory quality manual.
d. Table of Uncertainty Of Measurement – Estimate Of Values For Accredited Tests

Chemical Procedure No.	range	Test Name	Estimated Uncertainty	Units
CP No. 1	1 - 8 mg/l	Biochemical Oxygen Demand (BOD)	± 0.30	mg/l
CP No. 1	9 -70 mg/l	Biochemical Oxygen Demand (BOD)	± 3.2	mg/l
CP No. 1	71 - 700 mg/l	Biochemical Oxygen Demand (BOD)	± 40	mg/l
CP No. 3	35 mg/l	Suspended Solids (SS)	± 6.4	mg/l
CP No. 3	200 - 400mg/l	Suspended Solids (SS)	± 41.6	mg/l
CP No. 3	700 – 1000mg/l	Suspended Solids (SS)	± 80.0	mg/l
CP No. 5	2 - 12	pH	± 0.12	pH Units
CP No. 6	< 6 mg/l	Chemical Oxygen Demand (COD LR)	± 5.6	mg/l
CP No. 6	15 – 75 mg/l	Chemical Oxygen Demand (COD LR)	± 10.6	mg/l
CP No. 6	100 –135 mg/l	Chemical Oxygen Demand (COD LR)	± 17.4	mg/l
CP No. 6	120 – 1500mg/l	Chemical Oxygen Demand (COD) High Range	± 26.8	mg/l
CP No. 7	5.0 - 125 mg/l	Chloride (Cl.)	± 0.85	mg/l
CP No. 20	0.2 – 2.5 mg/l	Total Phosphorus (TP-P)	± 0.22	mg/l
CP No. 22	0.1 - 0.9 mg/l	Ammonia (Konelab)	± 0.04	mg/l
CP No. 22	1.0 – 2.0 mg/l	Ammonia (Konelab)	± 0.10	mg/l
CP No. 22	2 - 10 mg/l	Ammonia (Konelab)	± 0.32	mg/l
CP No. 22	11 – 19 mg/l	Ammonia (Konelab)	± 0.72	mg/l
CP No. 22	20 – 25 mg/l	Ammonia (Konelab)	± 1.56	mg/l
CP No. 23	0.05 – 1.00 mg/l	Orthophosphate as P (Konelab)	± 0.04	mg/l
CP No. 24	25.00 – 99.00 mg/l	Chloride (Konelab)	± 3.04	mg/l
CP No. 24	100.00 – 200.00 mg/l	Chloride (Konelab)	± 11.16	mg/l
CP No. 25	30.00 – 199.00 mg/l	Sulphate (Konelab)	± 3.42	mg/l
CP No. 25	200.00 - 250.00 mg/l	Sulphate (Konelab)	± 8.70	mg/l

November 2007

The raw data used to evaluate the above estimations is stored in the Wastewater Laboratory, Cork County Council.
The method followed is located in the Uncertainty of Measurement file and in the Eurachem Guidelines for Quantifying Uncertainty in Analytical Measurement.