

Environmental and Social Action Plan
Vinati Organics Limited
Project # 29988
Date: November 30, 2010

#	Environment/Social Action Plan	Indicator of Task Completion	Deadline
1.	(a) Engage a consultant for development and implementation of the SEMS certified to ISO 14001 and OHSAS 18001 standards with IFC's Performance Standards incorporated including the measures and procedures described in the ESRS (b) Complete documentation of the SEMS manuals (c) Complete implementation of a SEMS certified to ISO 14001 and OHSAS 18001 standards, with IFC's Performance Standards incorporated in the SEMS	Copy of appointment contract/work order provided to IFC Manual accepted by IFC Copy of ISO 14001 and OHSAS 18001 certificates for both Lote and Mahad plants provided to IFC	Prior to first disbursement March 2011 December 2011
2.	(a) Engage a consultant for carrying out: a detailed quantitative risks assessment (QRA) including domino effect considerations for existing and proposed facilities both at Mahad and Lote; and HAZOP study for existing processes at Lote Plant. (b) Completion of the QRA as described in the ESRS and the HAZOP for Lote, and development of an action plan based on the QRA and HAZOP recommendations (c) Complete implementation of the Action Plan developed pursuant to 2(b) here above	Copy of appointment contract/work order provided to IFC QRA and HAZOP report and Action Plan accepted by IFC Detailed note describing Action Plan implementation provided to IFC and/or confirmed through a supervision visit by IFC specialist	Prior to first disbursement March 2011 October 2011
3.	VOL to obtain :environmental clearance as per the condition stipulated in the consent to establish; and all applicable permits/consents	Copy of Environmental clearance and all permits/consents provided to IFC	Prior to first disbursement
4.	VOL will: (a) translate the model standing orders into the local language and make it available to all employees in either English or the local language as per the preference of the employee; (b) put in place an Employee Grievance Redress procedure consistent with PS2 provision; (c) include provision for maternity leave in accordance with the legal requirements; (d) display the abstracts of applicable labor laws in the local language in accordance with the provisions of these laws; and (e) put in place a process to undertake documented audit of contractor and service provider's compliance with all labor law requirements including for construction contractors engaged by VOL.	Appropriate documented evidence accepted by IFC and/or confirmed through a supervision visit by IFC specialist	March 2011
5.	VOL to implement interim measures described in the ESRS to upgrade occupational health and safety status at its Mahad and Lote plants including upgrade: procedures for	Appropriate documented evidence accepted by IFC and/or confirmed	March 2011

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	storing and handling sodium to ensure access from all sides; the sodium usage cycle from last in first out (LIFO) to first in first out (FIFO) cycle; fire detection and alarm system from push button to electronic system; procedures for safety equipment checking and its documentation; medical examination to a targeted medical surveillance program; work area environment quality monitoring to meet statutory requirements; procedures for enforcing usage of all required personal protective equipment (PPE); detailed assessment of worker exposure levels to hazardous chemicals and conditions (with and without PPE); tag out and lock out procedures; detailing and on ground implementation of emergency response plan; safety signage and exits; ventilation of some areas; painting and corrosion prevention; location, access and directions to showers, eye wash, SCBA, fire extinguishers and exits; railings and toe guards; provision, sealing and maintenance of flame proof fittings, gaskets, flanges, earth pits, earthing and jumpers; pressurizing of UPS battery room, and panel room at Mahad to prevent ingress of toluene; total enclosure of the utilities section at Lote; pressurizing of the substation room at Lote; removal of hydrogen cylinders to flameproof area; humidity control in control rooms; removal of air conditioners from UPS battery room; and construction contractor compliance with VOL's safety requirements.	through a supervision visit by IFC specialist	
6.	At its Mahad plant, VOL to: (a) segregate the sewage stream from the process wastewater stream, treat it through a STP to IFC guideline standards before disposal; (b) check the ETP facilities to plug any leakages/seepages; (c) provide an impervious lining in the sludge drying beds; (d) implement a program to test liquids in open storm drains for presence of hydrocarbons/organic compounds.	Appropriate documented evidence accepted by IFC and confirmed through a supervision visit by IFC specialist	October 2011
7.	At its Lote plant, VOL to: (a) put in place an STP to meet IFC guideline norms; and (b) implement a program to test liquids in open storm drains for presence of hydrocarbons/organic compounds	Appropriate documented evidence accepted by IFC and confirmed through a supervision visit by IFC specialist	October 2011
8.	VOL to implement a drinking water testing program to demonstrate conformance to Indian potable water standards	Sample Test reports accepted by IFC	October 2011
9.	VOL will upgrade the pollution control equipment to bring particulate matter emissions from boilers and thermic fluid heaters to within IFC guideline limits.	Detailed note (together with test reports) describing upgrade implemented accepted by IFC and confirmed through a supervision visit by IFC specialist	December 2011
10.	VOL will: (a) undertake benchmark monitoring of process stack emissions to demonstrate compliance with consent requirements and IFC EHS Guideline limits; (b) for process stack parameters that exceed IFC EHS guideline limits, develop a mitigation plan to bring emission levels within IFC EHS Guideline limites; and (c) complete implementation of the mitigation plan	(a) benchmark process stack emission reports accepted by IFC (b) Mitigation measures and plan accepted by IFC' (c) Detailed note (together with test reports) describing upgrade implemented accepted by IFC	(a)&(b) To be completed prior to first disbursement (c) to be completed by December 2011

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		and confirmed through a supervision visit by IFC specialist	
11.	VOL will upgrade facilities and procedures on storage and handling of hazardous materials, hazardous waste and spill containment in process areas, as described in ESRS.	Detailed note (together with test reports) describing upgrade implemented accepted by IFC and confirmed through a supervision visit by IFC specialist	October 2011
12.	VOL to: (a) undertake benchmark characterization of the ash including for presence of heavy metals and mercury as also Toxicity Characteristic Leaching Procedure (TCLP) test; (b) based on the findings of the test implement an appropriate interim ash handling and storage plan; and (c) in any case implement an ash utilization plan including a program to dispose it off to brick makers or other users.	(a) Benchmark monitoring and TCLP test reports accepted by IFC; (b) Detailed note describing interim arrangement accepted by IFC; (c) Detailed note describing ash utilization plan implemented accepted by IFC and (b) and (c) confirmed through a supervision visit by IFC specialist	(a) prior to first disbursement; (b) to be completed by March 2011; and (c) to be completed by October 2011
13.	VOL to develop and ensure that its transporters put in place a comprehensive transportation safety procedure including provision of training to drivers in defensive driving and handling transport emergencies.	Procedure accepted by IFC	Prior to first disbursement
14.	The Company to develop and implement a security personnel procedure consistent with IFC Performance Standard 4 provisions including as described in the ESRS	Procedures accepted by IFC	Prior to first disbursement
15.	VOL to put in place procedures for receiving, responding to and redressing as required, community/stakeholder information requests and/or grievances.	Procedures accepted by IFC	Prior to first disbursement