

To Our Shareholders:

## Report on Pile Installation Issue at Asahi Kasei Construction Materials

Asahi Kasei Corp.  
February 2016

In October 2015, it became clear that Asahi Kasei Construction Materials Corp. (AKCM), a subsidiary of Asahi Kasei Corp., manipulated data in the installation report for precast concrete pile installation work performed as secondary subcontractor to Hitachi High-Technologies Corp., which was subcontracted by Sumitomo Mitsui Construction Co., Ltd., the prime contractor for the construction of a condominium complex for Mitsui Fudosan Residential Co., Ltd. in Yokohama, Kanagawa, Japan (Yokohama Project). During subsequent investigation, it was found that manipulation of pile installation data had also occurred at other construction projects.

To investigate this issue, Asahi Kasei established a task force as well as a fact-finding committee comprised of employees specializing in legal, compliance, and construction technology fields, together with two outside attorneys. Furthermore, an independent commission comprised of three attorneys having no conflict of interest with the Asahi Kasei Group was established to a) verify the results of investigation by the fact-finding committee, b) investigate facts related to data in the installation report, etc., including by interviewing related parties, c) analyze the cause of the faulty installation and the diversion and modification of data, and d) provide recommendations on measures to prevent recurrence.

We hereby report to you the developments related to this issue as of February 2016.

### 1. Receipt of interim report from independent commission

On January 8, 2016, an interim report was received from the independent commission. The report mainly focused on the results of investigation of manipulation of pile installation data at the Yokohama Project. A summary is shown below.

- 1) There were problems with the on-site system to obtain installation data from control equipment, and because AKCM did not implement adequate measures to deal with these problems, installation data could not be properly obtained and stored.
- 2) In cases of failure to obtain data, the matter was not reported, but other pile installation data was diverted and embellished to fill in the gaps in the installation report. Causes for this included the absence of clear rules for dealing with instances of lacking data, a weak sense of wrong and lack of reluctance to manipulate installation data, and a feeling that the installation data was not important as long as the piles themselves were soundly installed.
- 3) AKCM's management system and training system were deficient, rules regarding the handling of installation data were inadequate, and sufficient training was not performed.
- 4) To prevent recurrence, improvement of control equipment, formulation of rules regarding the storage and submission of original installation data, and enhancement of systems for managing and training on-site personnel are recommended.
- 5) It was not confirmed that AKCM tolerated or knowingly overlooked the manipulation of installation data.

## 2. Administrative dispositions in accordance with Construction Business Act

On January 13, 2016, AKCM received administrative dispositions from the Kanto Regional Development Bureau of the Ministry of Land, Infrastructure, Transport and Tourism, in accordance with the Construction Business Act. Reasons given were (regarding 1, below) failure to assign the chief engineer as a full-time employee for the construction site in work to install precast concrete piles for the Yokohama Project, (regarding 2, below) undertaking the subcontract for the Yokohama Project as a blanket subcontract, and (regarding 3, below) manipulation of pile installation data in the installation reports submitted to the prime contractors in the Yokohama Project and other projects. Administrative dispositions were received as described below.

### 1) Instructions in accordance with Paragraph 1 of Article 28 of the Construction Business Act

To prevent recurrence of the violation, make officers and employees familiar with the content of the violation and the content of the corresponding administrative dispositions, implement training and education to obtain thorough compliance with relevant laws and ordinances, investigate and inspect the company's work operation method, etc., and report on measures implemented without delay.

### 2) Order to suspend business in accordance with Paragraph 3 of Article 28 of the Construction Business Act

Do not accept new orders for scaffolding and excavation work within the Kanto-Koshin region from January 28, 2016, to February 11, 2016.

### 3) Recommendation in accordance with Paragraph 1 of Article 41 of the Construction Business Act

Enrich the company's system to thoroughly prevent recurrence, and report without delay concrete measures implemented.

## 3. Issue of interim report by fact-finding committee

On February 9, 2016, the fact-finding committee issued its interim report. As investigation regarding the Yokohama Project was in accordance with the results of investigation by the independent committee, this report focused on results of investigation of data manipulation among the similar pile installation projects performed by AKCM over the past approximately 10 years. A summary is shown below.

1) Causes of data manipulation included i) circumstances conducive to occurrence of lack of data, ii) absence of clear measures to deal with lack of data, iii) poor recognition of importance of installation data among site agents, etc., and iv) issues of management of pile business at AKCM.

2) Measures to prevent recurrence included i) sound acquisition and handling of installation data, ii) formulation of rules to deal with lack of data, iii) establishment of proper management system, iv) performing training of site agents and other workers, and v) measures regarding organizational, personnel, and awareness problems at AKCM.

For further details, please refer to the attached *Interim Report of Investigation of Pile Installation Data Manipulation (Outline)*.

Asahi Kasei and AKCM take the administrative dispositions in accordance with the Construction Business Act with the utmost gravity, and are reinforcing efforts to achieve thorough legal compliance. Measures to prevent any recurrence are being immediately applied based on the interim reports of the independent commission and the fact-finding committee, while concerted efforts are directed toward the restoration of trust.

Note that in the third quarter of fiscal 2015, an extraordinary loss of ¥1.3 billion was recorded as loss on piling business for expenses incurred such as for investigation of manipulation of installation data.

#### 4. Change and reprimand of officers

On February 9, 2016, the changes and reprimands of officers as shown below were decided in order to delineate management responsibility related to the data manipulation issue, and to advance the recovery of trust in and the sustainable growth of the Asahi Kasei Group as a whole.

1) Asahi Kasei

Toshio Asano, President & Representative Director, Presidential Executive Officer, and Masahito Hirai, Representative Director, Vice-Presidential Executive Officer, will retire from their offices of Representative Director and Executive Officer on April 1, 2016, and their term as Director will expire at the close of the Ordinary General Meeting of Shareholders scheduled for June 2016. Hideki Kobori, Representative Director, Primary Executive Officer, will assume the office of President & Representative Director, Presidential Executive Officer, on April 1, 2016.

2) AKCM

Tomihiko Maeda, President & Representative Director, Presidential Executive Officer, will retire from his offices of President & Representative Director, Director, and Executive Officer on April 1, 2016, at which time Masateru Sakai, Director, Senior Executive Officer, will assume the office of President & Representative Director, Presidential Executive Officer.

In addition, considering the marked loss of public trust in the Asahi Kasei Group as a result of this issue, Directors of AKCM Tomihiko Maeda, Masateru Sakai, and Hitoshi Hagimoto (Director, Senior Executive Officer) are reprimanded with a 3-month reduction in remuneration.

Asahi Kasei is committed to taking all necessary action to ensure against the recurrence of any such issue, and to restore the trust placed in us.

(issued to shareholders of record as of September 30, 2015)

## Interim Report of Investigation of Pile Installation Data Manipulation (Outline)

Fact-Finding Committee  
Asahi Kasei Corp.  
February 9, 2016

### Overview of Investigation

- I. Background for establishment of the fact-finding committee
  - To investigate the data manipulation found in pile installation work for a condominium complex in Yokohama, Kanagawa, Japan
  - To investigate the facts related to data manipulation among the similar pile installation projects performed by Asahi Kasei Construction Materials Corp. over the past approximately 10 years (projects subject to investigation)
- II. Purposes of investigation and its organizational structure
  - Regarding the abovementioned project in Yokohama: Investigation in accordance with results of investigation by the independent commission
  - Regarding other projects subject to investigation:
    - a. Investigating whether or not there was data manipulation
    - b. Confirming the safety of structures in the case of data manipulation being found
    - c. Investigating the causes of data manipulation
    - d. Studying measures to prevent recurrence

### Matters Investigated and Method of Investigation

- I. Investigation of whether or not there was data manipulation in projects subject to investigation
  - Collecting installation reports from branch offices of Asahi Kasei Construction Materials and relevant external parties to the Tokyo Head Office of Asahi Kasei Construction Materials
  - Visual confirmation of graphs and numerical tables of installation data by multiple people
  - Comparing results of investigation by Asahi Kasei Construction Materials with results of investigation by prime contractors, and confirming whether there was data manipulation
  - Interviewing people involved in pile installation work, and comparing interview results with results of data verification
- II. Investigating the causes of data manipulation in projects subject to investigation
  - Interviews with relevant parties: Site agents of projects subject to investigation and other personnel of Asahi Kasei Construction Materials relevant to the precast concrete pile installation business (56 people in total)
  - Investigation of related documents: Minutes of management meetings of Asahi Kasei Construction Materials, internal company regulations, relevant electronic data stored on file servers of Asahi Kasei Construction Materials
- III. Record date of investigation
  - Record date of this report: February 8, 2016

## Preconditions of Data Manipulation

- Methods of confirming that bearing stratum is reached
  - Boring exploration
  - Confirmation by test drilling (when installing test pile)
  - Obtaining ammeter values of auger motor
  - Observation of changes in vibration and sound of auger motor
- Measuring apparatus used to obtain installation data
  - Analog ammeter (providing paper record of data but no electronic data)
  - Integral ammeter (providing both paper record of data and electronic data)
  - Flowmeter (providing both paper record of data and electronic data)
  - Integrated control equipment (providing both paper record of data and electronic data)
- Chief engineers and site agents
  - Role of chief engineers: Directing the management of technical aspects of construction work
  - Role of site agents: Supervising the overall process of pile installation work, and ensuring thorough execution of work and management of safety

## Investigation Results: Summary of Data Manipulation

I. Number of projects in which manipulation of data was found

→ 360 projects out of 3,052 projects

II. Specific methods of data manipulation

1. Analog ammeter: Methods of data manipulation in case of failure to obtain paper record of data
  - a. Ammeter data from another pile is copied in full
  - b. Ammeter data from 2 or more other piles are partially copied, then cut and pasted together
  - c. Spurious ammeter wave patterns are drawn by hand to embellish the data obtained by a. or b. above
2. Integral ammeter, flowmeter, and integrated control equipment: Method of data manipulation in case of failure to obtain both paper record of data and electronic data  
For portions where data is lacking, data from other piles is copied, partially with further embellishment by manually typing in spurious data. The pile number is retyped and the table of manipulated data is printed out and attached to the installation report.

## Result: Analysis of the Cause

### I. Circumstances conducive to occurrence of lack of data

- Environment conducive to occurrence of lack of data
  - Pile installation sites become wet, muddy, and dirty
  - Measuring apparatus are placed outdoors where they are exposed to the elements
- Factors related to operation of measuring apparatus
  - Mistakes in operation such as forgetting to turn on the power switch
  - Running out of ink or paper due to poor management
- Poor communication between site agents and other workers
- Factors related to handling of installation data
  - Characteristics of data recording media (paper or flash memory card)
    - Tendency to depend on electronic data, vulnerable to mishandling
  - Site agents not given spaces and environments conducive to proper storage and handling of installation data
  - Site agents not organizing installation data for long periods of time, but organizing all installation data at once after installation work was complete, etc.

### II. Absence of clear measures to deal with lack of data

- Procedures for handling of installation data and rules for dealing with lack of data not clarified and applied strictly
  - No arrangements agreed with contractors with regard to dealing with lack of data
- Failure to perform effective confirmation to prevent manipulation of installation data
- Absence of internal rules regarding handling of data, absence of confirmation system to prevent manipulation of installation data
- Failure to perform training on the necessity and importance of installation data, on technicians' ethics, and on compliance
- Insufficient awareness related to acquiring and handling installation data

### III. Poor recognition of importance of installation data among site agents, etc.

- Tendency among site agents to treat installation data lightly
  - Ammeter data not the only criterion for judging when bearing stratum is reached
  - Work procedures which ensure that the necessary amount of cement milk is injected
- Atmosphere which discourages site agents from reporting lack of data to Asahi Kasei Construction Materials or to contractors

### IV. Issues of management of pile business at Asahi Kasei Construction Materials

- Insufficient awareness of occurrence of lack of data
  - Inability to implement measures to deal with lack of data
- Problems related to system for sharing information on problem cases
  - Inability to establish thorough systems to share awareness of problems, identify the causes, and prevent recurrence
- Problems from immobilization of personnel
  - Personnel becoming immobilized due to severe business climate and high degree of specialization, resulting in failure to perceive problems in workflow

## Measures to Prevent Recurrence

### I. Sound acquisition and handling of installation data

- Improvement of measuring apparatus
- Implementation of measures regarding protection of measuring apparatus
- Revision of duties and positioning of site agents to prevent omission of operation of measuring apparatus
- Establishment of system enabling all on-site workers to exhibit teamwork, revision of division of roles
- Study of system for swiftly sending electronic installation data from pile installation sites to offices

### II. Formulation of rules to deal with lack of data

- Preparation of line of reporting
- Preparation of supplementary methods to confirm the quality of installation
- Preparation of arrangements to allocate costs if work is suspended

### III. Establishment of proper management system

- Preparation of rules for daily handling of installation data
- Preparation of rules for Asahi Kasei Construction Materials to aggregate the original installation data
- Implementation of site inspections and audits including perspective of unflinching acquisition and handling of installation data
- Promotion of communication between personnel of Asahi Kasei Construction Materials and workers at each site including site agents

### IV. Performing training of site agents and other workers

- Performing training on technicians' ethics and compliance to eliminate tendency to treat installation data lightly
- Performing training on operation of equipment
- Periodically confirming the skills and abilities of site agents, etc., and performing follow-up training

### V. Measures regarding organizational, personnel, and awareness problems at Asahi Kasei Construction Materials

- Heightening awareness of compliance through training on compliance and ethics for officers and employees of Asahi Kasei Construction Materials
- Renewal of internal system for information sharing, identification of the cause, and preventing recurrence if a problem occurs
- Adopting a configuration to increase opportunities for employees involved in the pile business to be seen by people of other organizations
- Creating a more open atmosphere, preventing ossification of concepts