LABOR AND INDUSTRIAL RELATIONS APPEALS BOARD

STATE OF HAWAII

In the Matter of DIRECTOR, DEPARTMENT OF LABOR AND INDUSTRIAL RELATIONS, Complainant, vs. NOVA GROUP, INC., Respondent.	)	CASE NO. OSAB 95-041 (OSHCO ID M0685) (Inspection #120604210)

DECISION AND ORDER

This Occupational Safety and Health case is before the Board on a written Notice of Contest by NOVA GROUP, INC. ("Respondent") from a Citation and Notification of Penalty dated June 14, 1995, issued by the DIRECTOR OF LABOR AND INDUSTRIAL RELATIONS, via its Division of Occupational Safety and Health.

The sole issue on appeal is whether Respondent violated §12-134-2(c)(6) of the Hawaii Occupational Safety and Health Standards.

For the reasons stated below, we vacate the June 14, 1995 Citation and Notification of Penalty for violation of Standard §12-134-2(c)(6).

FINDINGS OF FACT

1. Respondent was involved in a project located at the Natural Energy Laboratory at Keahole Point in Kailua-Kona, Hawaii. The project involved the construction of underground shafts and one tunnel. At the project site, Respondent had

excavated two parallel shafts into the ground. Shaft 1 was about 450 ft. inland from the open ocean. Respondent deliberately filled Shaft 1 with water. Shaft 2 was further inland and was left dry.

2. To connect the two shafts, Respondent used a microtunneling machine called the "mole" to bore a horizontal tunnel in the ground between Shaft 1 and Shaft 2.

3. Respondent had lowered the mole and assembled it in the dry Shaft 2. The mole consisted primarily of two sections. The front section was equipped with cutting heads to perform the drilling function. The rear section, known as the "pump", held the laser generator that was used to guide or propel the mole during the drilling process. A laser tube ran through the front and rear section of the mole. The laser generator in the rear section shoots a laser beam through this laser tube to guide or propel the mole to drill.

4. Because the mole was designed for underwater excavation and tunneling, it was equipped with a series of watertight bulkheads for underwater retrieval of the machine. The mole came with three bulkheads. Respondent fashioned a fourth bulkhead with access doors.

5. After positioning the mole in Shaft 2, Respondent had the mole bore a horizontal tunnel from Shaft 2 to Shaft 1. The tunnel was completed when the mole reached the end of the

tunnel and the front section of the mole entered the water-filled Shaft 1.

6. Once the front section of the mole entered Shaft 1, Respondent sought to remove and retrieve the microntunneler by first disconnecting the front section of the mole from the rear "pump" section.

7. Respondent sought to accomplish that task on June 10, 1995. On that morning, prior to the anticipated disconnection of the front section, a few of Respondent's employees entered the dry Shaft 2, and into the dry tunnel to remove some hoses and hydraulic lines from the rear section of the mole.

8. When the employees entered the dry Shaft 2 and the dry tunnel, there was no threat or possibility of flooding in the dry tunnel or the dry Shaft 2 from the water-filled Shaft 1, since the mole had nct yet been disconnected.

9. After the hoses and hydraulic lines were removed from the rear section of the mole, Respondent's employees exited Shaft 2. Subsequently, a diver employed by Respondent entered the water-filled Shaft 1 to disconnect the front section of the mole.

10. At the time the diver entered Shaft 1, none of the mole's bulkheads were in place to prevent water from entering the mole once the front section was removed or disconnected.

11. The diver, whose helmet was connected to a life line that provided him with oxygen, successfully disconnected the front section of the mole in the water-filled Shaft 1. But once the front section separated from the rear section, water from Shaft 1 began to enter the hollow laser tube of the rear section that was still lodged in the tunnel. The water flowed through the laser tube of the rear section of the mole and flooded the previously dry tunnel. From the tunnel, the water emptied into the previously dry Shaft 2.

12. The gush of water flowing from Shaft 1 and into the laser tube of the rear section of the mole created such a powerful suction that the diver became pinned against the mole. The impact somehow severed the life line from the diver's helmet.

13. Emergency crews were unable to free the diver in time. The diver drowned.

14. The fatal work accident was reported to Complainant, who later sent a compliance officer to investigate on January 17, 1995. As a result of the investigation, Respondent was cited for a violation of §12-134-2(c)(6) of the Standards.

CONCLUSIONS OF LAW

Section 12-134-2 of the Standards applies to underground construction of tunnels and shafts. Section 12-134-2(c)(6) provides as follows:

> If any possibility of flooding exists, either from sources within the tunnel or through shafts or portals, all necessary precautions shall be taken to protect against this event and a means or method of escape shall be preplanned.

Complainant cited Respondent for a violation of this Standard due to Respondent's failure to put any of the mole's bulkheads in place, which, if done, would have prevented water in Shaft 1 from flooding the tunnel and into Shaft 2. According to Complainant, the fatality in Shaft 1 could have been avoided, if any one of the bulkheads were in place during the mole's disconnection.

Respondent contends that Complainant wrongly cited it for a violation of §12-134-2(c)(6), because the diver was not exposed to or injured by the hazard against which the standard was intended to protect. We agree.

Section 12-134-2(c)(6) recognizes the hazard of flooding while employees are working in underground tunnels or shafts. The Standard requires the employer to take all necessary precautions to prevent flooding and to preplan a means or method of escape for employees if flooding were to occur.

In this case, there may have been a hazard of flooding in the tunnel and in Shaft 2, as the mole was being disconnected. However, no employees were working in the tunnel or the dry Shaft 2 during the disconnection of the front section of the mole. They had exited prior to the disconnection of the mole.

Therefore, there was no employee exposure to the hazard of flooding in the tunnel or in Shaft 2. The diver was not exposed to the hazard of flooding, because he was in Shaft 1, which was already filled with water prior to his entry.

Without employee exposure to the hazard of flooding in this case, we conclude that Respondent did not violate Standard §12-134-2(c)(6).

ORDER

The Citation and Notification of Penalty, issued on June 14, 1995, is hereby vacated.

Dated: Honolulu, Hawaii, OCT 24 1997.

FRANK YAP, JR., Chairman

CAROL K. YAMAMOTO, Member

EXCUSED
VICENTE F. AQUINO, Member

Leo B. Young, Esq.,
for Complainant

Robert D. Peterson, Esq.,
for Respondent

NOTICE TO EMPLOYER:

You are required to post a copy of this Decision and Order at or near where citations under the Hawaii Occupational Safety and Health Law are posted. Further, you are required to furnish a copy of this Decision and Order to a duly recognized representative of the employees.