



Interoffice Communication

To : A. H. Sather
From : J. V. Uptain
Date : 6/15/82
Subject : NOISE CONTROL REPORT AND PLAN

The status of the Aberdeen noise control program is as follows:

I. EXPOSURE LEVELS

A. Noise Dosimetry

In-plant noise dosimetry samples are taken, using the "db-301 Metrologger", made by Metrosonics, Inc. The work is done under the guidance of the Medical Department, using their equipment. The results of the 1982 survey are:

<u>Job Class</u>	<u>Tot. Samples</u>	<u>Average (% of PEL)</u>	<u>Range (% of PEL)</u>	<u>Overexposures (% of Tot. Samples)</u>
<u>Maintenance</u>				
Helpers	2	61	37-84	0
General Mech.	10	87	2-71	0
Painter/Carp.	1	4	4	0
<u>Laboratory</u>				
Lab Techs.	2	16	5-27	0
Lead Techs.	1	1	6	0
<u>Dry Blend</u>				
Utilities	2	39	33-45	0
<u>Compound</u>				
Compound Oper.	5	95	53-129	40
Compound Util.	2	92	86-98	0
<u>Vinyl Reactors</u>				
Reactor Oper.	6	47	30-65	0
<u>Vinyl Dryers</u>				
Dryer Oper.	7	43	31-60	0
Dryer Util.	2	122	107-136	100

The data clearly shows that Compound Operators who work near dicers and Vinyl Utilities tend to have noise exposures that exceed the permissible exposure limit. The use of hearing protection by those workers is generally good, but needs more emphasis.

B. Noise Surveys

Plant noise surveys are now conducted under the auspices of the Medical Department. The last such survey was conducted by G. Warren during April, 1982. That work included studies of high noise level areas, the establishment of 85 and 90 dBA noise level "contours", and property line noise level measurements. Mr. Warren's final report is expected to be issued by July 1.

The surveys conducted by the Medical Department are augmented, as needed, by spot checks made by Aberdeen plant personnel. In addition to a General Radio 1565-B sound level meter, the plant owns an Ivie Electronics IE-30A Audio Analyzer. This instrument is used for noise frequency analysis, as required.

II. NOISE ABATEMENT

A. Line 3 Resin Charge Vacuum Pump

The sound level within the immediate vicinity of this pump is 100 dBA while the pump is running. By this memo, Process Engineering is requested to specify the silencing equipment necessary to reduce the noise to acceptable levels and to write a work order for installation of the equipment as a project of the "Miscellaneous Projects under \$10,000" AFE.

B. 1982 Capital Budget Item A-11

This \$37,000 project provides for the installation of intake silencers, discharge silencers, and inlet filters for six plant blowers identified as noise sources during 1981. By this memo, Mechanical Engineering is requested to procure and install the outstanding balance of the equipment specified for the project.

C. 1983 Capital Budget

Noise projects under consideration for 1983 capital budgeting include:

1. North Fire Pump House

Better silencers are required for each of the four fire pump

C. 1983 Capital Budget (Continued)

diesel engines to reduce the noise to acceptable levels. These engines are high noise producers both inside and outside the plant. Citizens have complained of them.

2. Evacuation Steam Ejectors

Noise levels three feet away from the D-700 and D-745 evacuation steam ejector stack discharges amount to 110 dBA. Process Engineering and G. Warren are currently defining the silencing equipment required to reduce the noise to acceptable levels.

3. Fluid Bed Dryer

The equipment making up the new fluid bed dryer unit does not operate within the noise generation limitations included within the original specification put out for bid. The money necessary to correct these deficiencies is being considered for inclusion in the 1983 Capital Budget should Niro fail to correct them.

III. AUDIOMETRY

Hearing tests are conducted on each employee on an annual basis using the services of a contract health monitoring van. During testing, the van is parked in front of the plant, under the noise shadow of the east warehouse, to provide the low, hearing booth noise levels required for successful audiometry work. The success of this practice was proven during the last van visit by taking noise level measurements inside the hearing booth, using the IE-30A Audio Analyzer mentioned in IB above. Baseline audiograms will be completed as required by the end of August, 1982.

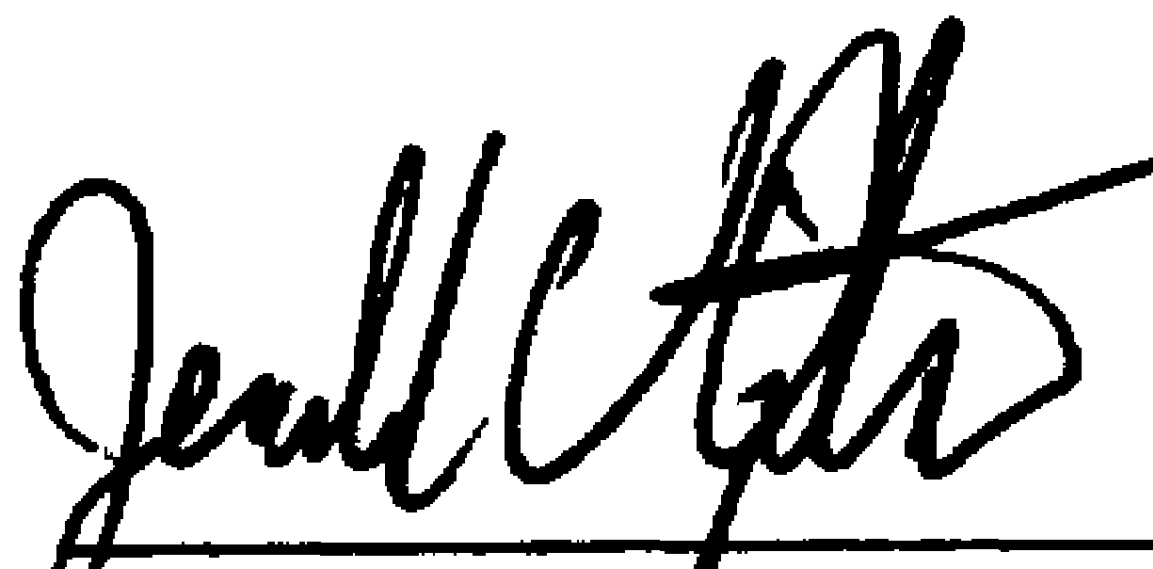
IV. PERSONNEL PROTECTIVE EQUIPMENT AND WARNING SIGNS

Employees working in high noise areas are required to use approved hearing protection, normally ear plugs. Compliance is generally good, although more emphasis is needed with Compound Operators and Vinyl Utilities (see IA above).

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IV. PERSONNEL PROTECTIVE EQUIPMENT AND WARNING SIGNS (Continued)

Warning signs are posted in locations where such protection has been required. It is anticipated that the noise level contouring work (see IB above) will show a need for sign changes in certain areas, an example being the fluid bed dryer area. This evaluation will be made at the time the noise report is received from Medical Division.



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