



Practical Planning for Inspections

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Practical planning of inspections

Stages of inspection planning:

- Background research
- Planning interviews and verifications
- Generating site specific checklists
- Things to keep in mind during an inspection

Background research

Information we use when preparing for inspections

- Discussion with permit section (case handlers)
- Permit for emissions
- Annual monitoring reports
- Previous inspection reports
- Archived documents
- Standard Checklists
- Online register of all organisations (Brunnøysund)
- Internet search



Discussion with permit section (case handler)



- Status for this plant
- Dates for planned maintenance stops (especially for unannounced inspections)
- Any areas that they want us to focus on- for example if the plant has asked for changes in the permit or if there have been changes in the regulations
- Areas that are identified as high risk for this branch

Norcem's Permit

- Refers to certain relevant regulations e.g.-
 - Internal control system
 - Energy
- Specifies the different emissions that are permitted from different sources.
- Specifies the types and amounts of waste that can be incinerated to create the energy for production of cement.
- Specifies the conditions for incineration of different waste types.
- Conditions for the deposition of waste
- The permit also lists certain reports that needed to be sent to NEA within certain dates

Tillatelsen er gitt i medhold av lov om vern mot forurensninger og om retfall av 11. januar 1981 nr. 6 § 11, 12- § 16. Tillatelsen er gitt på grunnlag av opplysninger gitt i saknad av 10.09.03 og 29.04.05, samt opplysninger Fremkommnet under behandlingen av saknaden. Vilkårene fremgår på side 2, 2a og med side 11. Tillatelsen er utstedt tidligere utgått.

Beslutningen skal på forhånd avklares skriftlig med Klima- og forurensningsdirektoratet (Klif) omfatter den enkelte i forenklet forhold til opplysninger gitt i saknaden eller under sakbehandlingens løp som kan ha miljømessig betydning.

Deretter behøve eventuelle deler av tillatelsen ikke er tatt i bruk innen 4 år etter at tillatelsen er gitt i kraft, skal beholderen sende Klif en redegjørelse for virksomhetens omfang slik at Klif kan vurdere eventuelle endringer i tillatelsen.

Bedriftsdata	
Bedrift	Norcem AS Brevik
Statlig godkjent postadresse	Setervangen 2
Postadresse	Postboks 13, 3051 Brevik
Kommune og fylke	0807 Porsgrunn, Telemark
Opp nummer (bedrift)	634440123
NACE-kode og versjon	28.91 Produksjon av sement
NACE-kode	104.11
ICPE-nummer for virksomheten	21

Klif's referanse		
Utgave	Ansørgesnummer	Kontrollkode
2004 0177	A60007	1

Tillatelse gitt	Endringsnummer	Endr. endret
08.12.2004		18.04.2012
David Surby saksbehandler		Rune Gummelstad seniorrådgiver

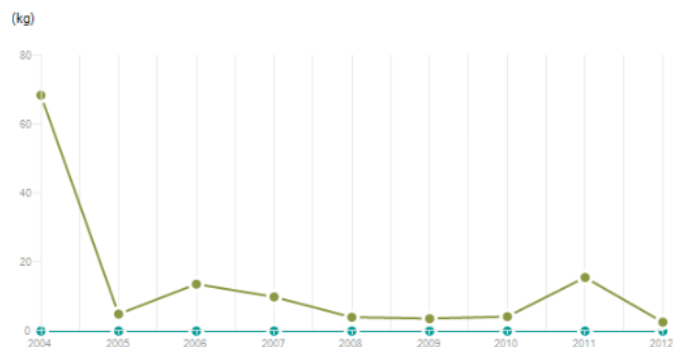
¹ Iforurensningsforordningen kapittel 16 om behandling av tillatelse etter forurensningsloven
² Iforurensningsforordningen kapittel 17 om utslipp av gasser og stoffer fra KLD's
 løslatelse/beholdning og kontroll av forurensete virksomheter (se forurensningsloven)

Annual monitoring reports

- Verify the emissions against the permit
- Verify waste handling against the permit
- Follow trends for emissions and waste (norsk utslipp)
- Lists self-reported non compliances
- Lists complaints from neighbours

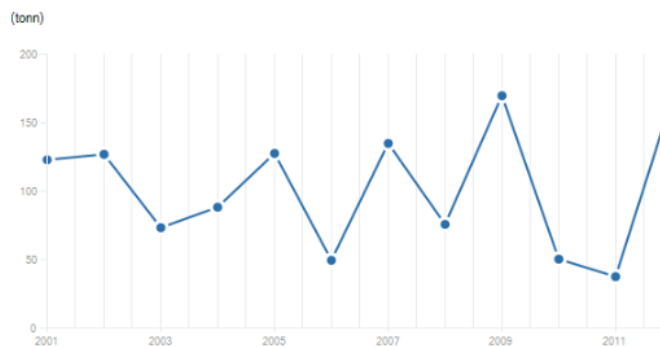
Releases of Lead (Pb) (in kg per year)

Norcem Brevik



Hazardous waste (in tonn per year) (See all categories)

Norcem Brevik



Previous inspection reports

- We will generally check the last 2-3 inspection reports and the reply from the plant.
- We follow up the non-compliances and also the observations.
- There is also a section in the report called «other aspects». The inspector uses this section to give information to the next inspector and also to the public. For example in the 2012 report for Norcem;-
 - The previous inspection report describes a change in the way emissions are reported.
 - Also common to write that a previous non compliance has been verified

Archived documents



- Use correspondances between the organisation and the Environment Agency to check the status of the organisation
- We look at the application for the permit and reponses to inspection report
- Check if any other orders have been given to the organisation

Planning interviews and verifications

System based control

The Internal Control Regulations (IC) Regulations relating to Systematic Health, Environmental and Safety Activities in Enterprises

**Mandatory, national system from
1991, similar to ISO 9001**

All enterprises must establish a
system of due diligence (a control
system):

- Overview over relevant regulations
- comply with the health, safety and environmental requirements from the regulators
- Internal system for non-compliances
- Promote continuous improvements

Internal control entails that the enterprise shall:	Documentation
1 ensure that those Acts and regulations in the field of health, environmental and safety legislation that apply to the enterprise are accessible, and have an overview of requirements of particular importance for the enterprise.	
2 ensure that the employees have sufficient knowledge of and proficiency in systematic health, environmental and safety activities, including information on changes made	
3 ensure employee participation so as to utilise overall knowledge and experience	
4 establish health, environmental and safety objectives	must be documented in writing
5 have an overview of the enterprise's organisational set-up, including allocation of responsibilities, duties and authority in regard to the work on health, the environment and safety	must be documented in writing
6 identify dangers and problems and against this background assess risks; draw up appurtenant plans and measures to reduce such risks	must be documented in writing
7 implement routines to uncover, rectify and prevent breaches of requirements established in or pursuant to the health, environmental and safety legislation	must be documented in writing
8 carry out systematic surveillance and reviews of the internal control system to ensure that it functions as intended	must be documented in writing

A 'normal' inspection

- ~75% of time used in interviews with key personnel
- ~25% of time is site checks
(this varies a lot from inspection to inspection)
- Spot checks of emissions to water
- We order a third party check of emissions where necessary

Main topics of a control

(not all included every time)

- The system for internal control
- Self monitoring programmes
- Emissions control
- Specific permit requirements
- Maintenance of equipment
- Accidental discharges
- Use and discharge of chemicals
- Waste management

Areas with specific training

Standard Checklist questions for emissions control

- Standard questions asked during controls of emissions program include;
 - What is the analytical error on your reported emissions data?
 - Do you have a documented evaluation of whether the sampling frequency give results which are representative for your emissions?
 - Have you evaluated if the analyses you use are sufficient?
 - Can we see the calibration certificates for your measuring equipment?
 - Do you have a third party evaluation for your measuring equipment?
 - Are measurements carried out using Norwegian Standard methods?

Use of standard checklists

- Normal inspections:
 - We go through the checklist and choose the questions that are most relevant and use these to create a site specific checklist
- For campaigns:
 - It is important for statistical reasons to get an answer for all of the questions.

Generating site specific checklists

Generation of specific checklist

- Generate a list of questions we need to ask based on the information we have studied and tips from the case handler
- We will also generate a list of areas of the plant that we will need to inspect

Arranging the interview (planned inspections)

- We will send over a list of the general topics we want to discuss during interviews as well as the processes we want to look at
- We work together with the plant to find a solution that works best so that we can meet the right people and ask all of the important questions from the checklists.

Things to keep in mind during an inspection

Performing the audit - interviews

- Interview with key personnel at different levels in the organization
- Keep focus on predefined topics
- Prepare questions according to activity/theme
- Why ask this question?
- What do you need information about?
- Main questions – follow up questions

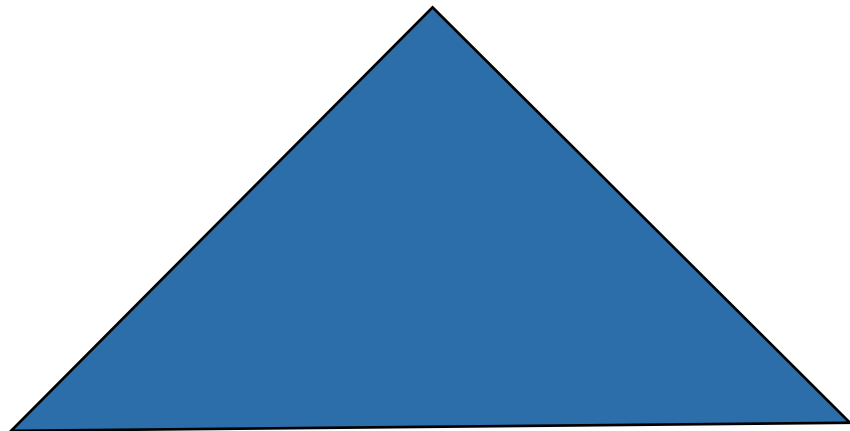
Performing the audit - interviews

Inquiry/ investigative phase (open questions)	What Where When Why How Explain Can you describe..
Clarifying phase (closed questions)	Do I understand you right.... Is it like.... Do you always do it like this...
Conclusive phase (closed questions)	Do you agree that.... Is this statement right.... Establish facts

Human factor

- Auditees must be treated with respect
- People will often be nervous, important to be supportive
- Create mutual trust and good spirit
- Professional care
- Confidentiality and discretion
- The company/systems are audited, not individuals
- Show interest under the audit (participate)

Who do you interview?



Corporate level

Management

Mid-level

Employees/operators

Approx. 30-45 minutes per interview

Start at top/bottom?

Top is good for overview and understanding of goals and level of implementation of initiatives.

Bottom is best to verify the practice.

Performing the audit - verifications

- On-site inspections
- Investigations of documents, journals and logs
- Observe the practice



Performing the audit – closing meeting

- Presentations of the conclusions from the audit
- The wording of the non-compliances and observations are presented
- Clear up misunderstandings / quality check - not discussion on how to correct the non-compliances
- Therefore all individuals who have participated in the audit should be present

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